The Best of APPLE PUBLIC DOMAIN SOFTWARE

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Judy Rosenthal, Editor

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Introduction

The purpose of this book is to acquaint the Apple II/III/c user with the vast amount of public domain software available. Software is known as public domain if the author of a program gives permission for the general public to freely copy that program. The software in this book was compiled from user groups and individuals. Some programs are self-explanatory or include documentation. Others have no documentation and require more expertise on the part of the user. This book makes notations where documentation or instructions are on the disks. Acquiring public domain software is an easy and inexpensive way for the computer enthusiast to build a library of useful, educational, and entertaining software.

Personal domain software is also contained in this book. The authors of these programs have asked for a specified contribution from the user. Instructions and address are found on each personal domain software disk. The disks that contain this type of software are FIRE ORGAN, on DISK NO 020, DIVERSI-DOS, on DISK NO 226, and ONE-KEY DOS on DISK NO 229.

The first section of this book gives instructions for running the disks in the library. Instructions are given for programs in Applesoft BASIC, Integer BASIC, assembly language, and text files. The next section tells what software and/or peripherals are necessary to run programs in Integer BASIC, Applesoft BASIC, Pascal, and CP/M. The requirements are listed for each model of Apple computer: Apple II, II Plus, IIe, IIc, and III.

The body of the book contains descriptions of the programs on the disks. The disks are arranged by categories. There are twenty categories, ranging from art to utilities. Check the Table of Contents to locate a particular category. Each category is prefaced by a short introduction describing the programs. Each disk has a heading with a number and a category name, for example 045 BUSINESS. Following this heading will be the filetypes, filenames and descriptions for all the programs on that disk. This book does not list the number of sectors used by each program; they may be found on the disk's catalog.

A glossary of commonly used abbreviations and computer terminology follows. Next an index lists, alphabetically, the programs by subject or filename. After the subject or filename is a number which refers to the disk containing the particular program. The disks are arranged numerically.

The last two pages consist of a submission form and a disk order form. The submission form is for the use of the software author, (or anyone in possession of public domain software), who wishes to submit a new program in exchange for a disk in this library. The disk order form may be used to order disks by mail from the Public Domain Exchange.

Due to the nature of public domain software, the Public Domain Exchange cannot guarantee the contents of the disks; however, defective disks may be returned for exchange. The Public Domain Exchange cannot support or debug specific programs, but general system level support is offered.

How to Run Programs in the Library

The way a program is started depends on the type of file it is. The four filetypes in this library, "A", "I", "B", "T" are all started differently. You can tell the type of file a particular program is by the letter preceding the filename in the book.

Running Applesoft BASIC ("A") programs

To Run Applesoft BASIC, insert the disk, and when the cursor appears type "RUN", a space, and the file name, then press the return key to run. For instance, type:

RUN SPELLING

to run the Applesoft BASIC program SPELLING.

Running Integer BASIC ("I") programs

When using an Apple II plus, IIe, or IIc, run the DOS 3.3 System Master first before running a program written in Integer BASIC. If a copy of this disk is needed, a public domain version is available through the Public Domain Exchange. It is entitled "I" and can be found on disk number 068. Load the Integer BASIC disk and wait until a " > " appears. If only one disk drive is available, take the disk out and insert your program disk. If two disk drives are available, insert your program disk into the second drive. Type "RUN", a space, and the filename after the " > " prompt and press the return key. For instance, type:

RUN PONG

to run the Integer BASIC program PONG.

Running Binary ("B") program

Binary or assembly language files are generally created by a programmer and are sometimes used in conjunction with an Applesoft BASIC or Integer BASIC program. Some of these files may be accessed; type "BRUN", a space and the filename and press the return key. For instance, type:

BRUN INVESTMENTS

to run the binary program INVESTMENTS. This book does not list all binary files contained on the disks.

Running Text files ("T")

Text or data are used in conjunction with other BASIC programs. Sometimes, text files are necessary for the correct execution of a BASIC program. This book does not list all text files contained on the disks.

Program Requirements

COMPUTER	PROGRAM	REQUIREMENTS
Apple II	Integer BASIC	Some models may need the Dos 3.3 System Master
	Applesoft BASIC	16K RAM card or 16K Applesoft ROM DOS 3.3
	Pascal	16K RAM card Pascal Language disk set 80 column card recommended
	CP/M	CP/M (Z 80) card 80 column card recommended 16K RAM card recommended
Apple II Plus	Integer BASIC	DOS 3.3 System Master disk 16K RAM card or 16K Integer ROM
	Applesoft BASIC	none
	Pascal	16K RAM card Pascal language disk set 80 column card recommended
	CP/M	CP/M (Z 80) card 80 column card recommended 16K RAM card recommended
Apple IIe	Integer BASIC	DOS 3.3 System Master disk
	Applesoft BASIC	none
	Pascal	Pascal language disk set 80 column card recommended
	CP/M	CP/M (Z 80) card 80 column card recommended
Apple IIc	Integer BASIC	DOS 3.3 System Master disk
	Applesoft BASIC	none
	Pascal	Pascal language disk set version 1.1 or greater
	CP/M	Special CP/M (Z 80) card for the IIc
Apple III	Integer BASIC	DOS 3.3 System Master disk Emulation mode
	Applesoft BASIC	Emulation mode
	Pascal	Not recommended
	CP/M	does not run

Tutorials

A tutorial program enables the viewer to learn without the aid of written documentation or help from others. The programs on these disks teach the basic operations of the Apple II, the disk operating system, and the disk drive. Other programs guide the user through such subjects as BASIC, Pilot, Integer BASIC, and Applesoft BASIC programming techniques.

DISK NO 000		TUTORIALS
I	BASIC PROGRAMMING	Teaches Integer BASIC programming using 4 other programs on this disk.
A	BASIC-INTEGER	Loads Integer BASIC into memory.
I	CONVENTIONS	Teaches better BASIC programming techniques.
I	CPU 6502	Limited 6502 mini-assembler.
I	HELLO SAMPLE	Hello program that catalogs the disk.
I	MICRO 6502 SIMULATION	Simulates 6502 microprocessor for purpose of instruction.
I	MINI ASSEMBLER TUTORIAL	Makes different sounds using the joystick.
I	SWEET 16 DISASSEMBLER	Limited machine language disassembler.
I	TOP DOWN PROGRAMMING	Demonstrates a particular style of programming.

DISK NO 001		TUTORIALS
A	APPLE II DEMO	Demonstrates an Apple II computer.
I	BASIC-APPLESOFT	Puts computer into Applesoft BASIC.
A	BUZZ	Programming demonstration.
I	DISK AIDE	Teaches better ideas on editing a program.
I	DISK AIDE DOCUMENTATION	Shows how to use DISK AIDE.
A	DOS SYSTEM INSTRUCTION	Memory addresses for 38 functions.
A	PILOT VERSION I	Interpreter of Tiny Pilot Version 1.0+.
I	PROGRAM DEVELOPMENT PAC (C)	Edits BASIC programs.
A	SUPPLEMENT MINI ASSEMBLER	Makes mini-assembler step and trace functions accessible through Applesoft.
I	TEXT FILE READ	Reads text files.
I	TEXT FILE WRITE	Writes text files.
I	TEXT HELLO	Menu that uses the following text files.
T	TEXT HOW TO	Teaches how to write text files.

T	TEXT INTRO	Introduction to text files.
T	TEXT PEEK POKE CALL	Explains PEEKS and POKES.
T	TEXT PROGRAMMING	Text programming hints.
T	TEXT REDBOOK	Substitution program for "simple subroutine" in pages 43-45 "Red Apple II Reference Manual".
T	TEXT SOFTWARE	Advertisement for an Apple swap.

DISK NO 002		TUTORIALS
A	APPLE TUTORIAL (C)	Instructions for Applesoft BASIC. Helpful hints are given, also some guidelines, and a reference chart.
A	MENU	"
A	STRT	"
A	HELP	"
A	PT.1	"
A	PT.2	"
A	QREF	"

DISK NO 003		TUTORIALS
A	HELLO.BEU	Binary entry utility for entering binary data into memory.
A	BEU.INSTRUCTIONS	"
B	BEU.48K	"
B	INTBEU.1	"
A	MASM INSTRUCTIONS	Simple assembler and editor.
B	MASMA	"
A	MASMA DOC	Documentation for MASMA.
B	ALL PURPOSE DISASMB.(800)	Disassembles memory.
A	BFILE LIST	Searches disk for all binary files.
A	MEM/DUMP TO TEXT FILE	Dumps memory to text file.
A	MEMORY INTERPRETER	Shows memory addresses.
A	MINI-ASSEMBLER INSTRUCTIONS	Apple mini-assembler, writes assembly language.
B	MINI-ASSEMBLER ($800)	"
I	MINI-ASSEMBLER TUTORIAL	Language instructions.
A	M/L TUTORIAL	Introduction to machine language.
T	M/L TUTORIAL.TEXT	"

Art

These disks contain a vast array of programs that displays and prints graphics. Many are high resolution and some are coordinated with sound effects. The graphics may be computer-generated or user-created and include popular themes, special effects, and three-dimensional figures. With these disks users can watch a colorful fireworks display, see a three-dimensional spaceship in flight, draw their own face, and print an original banner.

Note: Programs require a joystick where indicated.

DISK NO 007		ART-TOMS TOOL KIT

The following character sets are on disk: BB.SET, BYTE.SET, COLOSSAL.SET, COUNT.SET, FLOW.SET, GOTHIC.SET, AND OUTLINE.SET.

A	HRCG INSTRUCTIONS	Instructions for HRCG EDITOR.
A	HRCG EDITOR	Create or edit DOS Toolkit character sets.
T	HRCG SETUP	Exec file that appends hi res test to program.
A	HRCG GRID MAKER	Printer utility for HRCG EDITOR.
A	EDU-PAINT	Features like those used by Koala Pad and more.
B	APPLE CALLIGRAPHY	Load choice of font size and colors, (hi res).
B	SET CONVERT	Converts Toolkit sets to Apple Calligraphy.
A	MX80 HI-RES DUMP	Prints hi res pictures to Epson printer.
T	ABOUT THIS DOM	Tells more about disk.
T	ABOUT EDU-PAINT	Directions for the program.
T	ABOUT HRCG EDITOR	"
T	ABOUT APPLE CALLIGRAPHY	"
T	PROG.LIST	A file which stores information used by menu hello program.

DISK NO 008		ART
I	ART + TONE	Visual effects with colorgraphics, weaving, hyperbola, etc..
I	ART 3D ROTATION	Rotates 3-D objects randomly.
I	ART ACNE	Continuously changing mottling effect.
I	ART ALPHABET 2	Colorgraphic messages.
I	ART BIT BIN 1	Drops bits in a bin.

I	ART COLOR EATER	Eats colored blocks bite by bite.
I	ART CRAZY	Lo res colorgraphic scrolling bands.
I	ART CURVES	Continuously moving curves.
I	ART DEMOS 1	Various graphics involving weaving, hyperbola, etc..
I	ART DRAW A FACE	Draw your own face.
I	ART DRAW LETTERS	Draws message already programmed in.
I	ART EGG	Patterns formed by various colored ovals.
I	ART EGG DOC	Documentation for ART EGG.
I	ART FACES	Constantly changing sad and happy faces.
I	ART KALEIDOSCOPE 1	Constantly changing kaleidoscope graphics.
I	ART LIFE ARENA	Adds and removes colored blocks within a rectangle.
I	ART LINES	Constantly changing graphics with lines.
I	ART MOSAIC CROSS	Superimposes mosaics over a cross.
I	ART MUSIC CLOSE ENCOUNTER	Graphics with "Close Encounter" theme.
I	ART NATL PRIDE 1	Neil Armstrong's "Eagle Landing".
I	ART NUMBERS	Prints numbers in color.
I	ART PLAID LOOP	Overlays random blocks with geometric patterns.
I	ART PLOTTING	Creates pictures by plotting.
I	ART RANDOM LINES	Covers screen with random lines.
I	ART RIGHT ANGLES	Progressive right angles.
I	ART ROM THE ROBOT	Stationary robot with flashing eyes.
I	ART SQUARES	Random, overlaying rectangles.
I	ART TIME TUNNEL	Colorgraphics of a tunnel effect.
I	ART TWINE 1	Intertwining ovals in 1 color.
I	ART TWINE 2	Intertwining ovals in different colors.
I	ART TWINE DOC	Access to ART TWINE 1 and ART TWINE 2.
I	ART WINDOW	Expanding and contracting frame made of words.
I	CLOCK 1	Functions as a digital clock.
I	CLOCK 2 WEINSTOCK	"
I	CLOCK 4 MASSIMO	"
I	CLOCK 5 COHN	"
I	JOYSTICK ?	Lo res graphics editor, (requires joystick).
I	MEMORY ORGANIZATION	Visual reorganization of bytes.
I	TV CONVERGENCE	Generates patterns.
I	TV PATTERN GENERATOR	Generates 6 types of patterns.

DISK NO 009		ART
I	ART 2 CIRCLES	Draws hi res designs.
I	ART ALPHABET 1	Colorgraphic characters.
I	ART ANIMATIONS	Animation of train, fireworks, and rainbow.
I	ART BEEP SQUARES	Overlaying rectangles with beeps.
I	ART BIRTHDAY	Create own message in graphics.
I	ART DEMO 2	Various hi res graphics demos.
I	ART DEMO 4->NEEDS WORK	"
I	ART HOLIDAYS	Lo res graphics with holiday theme.
I	ART PAK 3	Create with random lines and rectangles.
I	ART PLOT CONTOURS	Graphics depicting contours.
I	ART SAMPLER	Billboard display of art works.
I	ART XMAS 1	Continuously changing graphics of a Xmas card.
I	ART XMAS 2	Continuously changing Xmas scenes.
I	PAGE 1 AND 2	Switch from page 1 to page 2, with graphic illustrations.
I	POSTER SNOOPY FOOTBALL	Prints poster of Snoopy kicking a football.

DISK NO 010		ART
A	ART 3D HYPERBOLOID	Displays hyperboloid in 3-D.
A	ART BITS	Displays of random colored bits.
A	ART BOUNCING BALL	Select a bouncing ball in choice of colors.
A	ART COLOR BAR	Draws colored bars in various patterns.
A	ART COLOR PATTERN	Draws a variety of color patterns.
A	ART DAY->NEEDS WORK	Displays various geometric line figures.
A	ART DISPLAY	Eight hi res kinetic art displays.
A	ART DRAW	Hi res, sketch-with-joystick program.
A	ART DRAW SHAPES	Generates 4 hi res shape tables.
A	ART DRAW SHAPES ADDER	Creates a shape table from shapes on program.
A	ART DRAW SHAPES WITH &	Draws lo res shape tables.
A	ART ENTERPRISE	Hi res demo of Star Trek's Enterprise.
A	ART FLOWERS	Draws flowers.
A	ART FLUTTER BY	Hi res graphics of a frog catching a butterfly.
A	ART GIFTED	Hi res graphics using lines.
A	ART HORIZ BARS	Graphics using horizontal bars.
A	ART HYPER I	Hi res colorgraphics using rotating line.
A	ART HYPER II	"
A	ART ILLUSION	Pulsating patterns.

A	ART IMPACT	Continuously changing triangles.
A	ART KALEIDO KEYS	Change graphics by pressing one or more keys.
A	ART KALEIDO SHAPE	Continuously changing kaleidoscope effects.
A	ART KALEIDOSCOPE	Kaleidoscope graphics.
A	ART MANDALA	3-D objects of increasing sizes.
A	ART METER	Measures the position of your paddle.
A	ART MULTICOLOR I	Changing graphics in multicolors.
A	ART PACIFIER	Select various line graphics.
A	ART PATTERN BW	Creates patterns by using positive integers.
A	ART PLAIDS	Creates plaids by vertical and horizontal lines passing through each other.
A	ART POLYGONS	Creates polygons of various sides and radii.
A	ART QUILT	Forms 1 quilt pattern.
A	ART RADAR	Straight line acting as a radar beacon.
A	ART ROSE SUPER	Enclosed, curved figures in various patterns.
A	ART RUBBER ROSE	"
A	ART SINEWAVE	Draws sine wave around a globe.
A	ART SPIRO I	Sets parameters, and draws spiral figures.
A	ART STRIPES	Draws I set of vertical and horizontal bars.
A	ART SUPER PLUS	Graphics with hexagons and spirals.
A	ART THEME I	Creations with radiating lines.
A	ART TRIANGLE	Gives illusion of a 3-D triangle.
A	ART VALENTINE	Modify a valentine message.
A	ART WINDOWS	Draws a series of geometric patterns.
A	JOYSTICK	Manipulate a square figure with a joystick.
A	PICTURE LOADER	Loads the catalog.
A	POSTER	Prints a message in a poster form.
A	POSTER BANNER II	Prints a message in a banner form.
A	POSTER BUNNY	Prints a picture of a bunny.
A	SCREEN TEST	Programs to check the video screen.

DISK NO 011		**ART**
I	ART APPLE LOGO	Displays Apple II logo.
I	ART APPLEGRAPHICS	Graphics using lines, mosaics, and spirals.
I	ART BUTTERFLIES	Two butterflies in flight, (lo res).
I	ART COLOR SHOW	Continuously changing kaleidoscope effects.
I	ART DAZZLER	Pulsating, wavelike patterns.
I	ART DOTS OR LINES	Colorgraphics created with dots or lines.
I	ART DRAWING	Draws "PLUS" with dots.
I	ART GRA SPEED	Use paddle to control colorgraphics.

I	ART GRAPHIC	Changing graphics showing magnification.
I	ART KOFTINOFF	Graphics formed by dots and bars.
I	ART MODERN PAINTING	Creates display resembling modern art.
I	ART MOSIAC	Continuously changing mosaic patterns.
I	ART NATL PRIDE 2	Graphics of Paul Revere, (lo res).
I	ART PLAID COLORS	Colorgraphics of plaids.
I	ART ROCKET	Rocket in random flight patterns.
I	ART SHAPE BUILDER	Manipulate a dot using compass positions.
I	ART SNOWFLAKES	Kaleidoscope effects resembling snowflakes.
I	ART VARIATIONS	Colorgraphics with a theme and variations.
I	ART WALLS	Ball bouncing in a maze of walls.
I	ART WORM	Worm gliding in a maze.
I	BAR GRAPH	Plots a bar graph.
I	BILLBOARD	Programmed message in billboard form.
I	CAR ANIMATION	Steer car with a paddle, (lo res).
I	CLOCK 3 MASSIMO	Digital clock.
I	CLOCK 6 TARNOFF	Uses digital clock as calendar and alarm.
I	DOODLE	Doodle with lo res graphics.
I	HOLIDAY PAK	Christmas themes, (colorgraphics).
I	LINCOLN	Draws Lincoln's portrait.
I	PULSAR	Repeating patterns in machine language, (hi res).
B	PULSAR.1	Pulsating set of dots.
I	VIDEO TEST	One to six test patterns used for maintenance.
I	WASHINGTON	Portrait of Washington.

DISK NO 012		**ART**
A	ART 3D PROJECTIONS	Changes the angle of a cube, square or hexagon.
A	ART APPLE	Displays the Apple logo.
A	ART APPLE CORPS	Displays the Apple Corporation logo.
A	ART APPLE ROSE	Designs of stars and crosses using lines and dots.
A	ART CIRCLES	Designs with dots.
A	ART CIRCLES AND PDLS	Manipulate hi res graphics with the paddle.
A	ART DAZZLE	Pulsating, mosaic patterns.
A	ART FLIP IT	Flips graphics and varies the speed.
A	ART HERRINGBONE	Herringbone pattern.
A	ART HERRINGBONES	Another herringbone pattern.
A	ART HONEYCOMBS	Honeycomb pattern.

A	ART HYPER III	Radiating lines, (colorgraphics).
A	ART HYPER IV	"
A	ART HYPER V	"
A	ART IMPOSSIBLE	3-D figure with optical illusion.
A	ART ONELINER I	Pinwheel effects, (colorgraphics).
A	ART ONELINER II	Form dots, (colorgraphics).
A	ART PLAY	Draws patterns using a rotating line.
A	ART RANDOM WALK	Draws random figures.
A	ART ROSE PLASTIC	Floral patterns using a continuous line.
A	ART SHAPES	Overlaying shapes with changing colors.
A	ART SPIRAL I	Various spiral patterns.
A	ART SPIRAL II	More spiral patterns.
A	ART SPIRO II	Large, curved, enclosed, repeating pattern.
A	ART STRING	Draws a design with 1 continuous line.
A	ART SUNBURST	Draws starburst designs.
A	ART XMAS SCENE	Trims the tree, and writes a message.
A	BILLBOARD ROUTINE	One line display on a billboard.
A	CLOCK GRANDFATHER	Displays time with ticktock, chime and alarm.
A	GRAPHING	Plot a graph with your own equation.
A	POSTER LOVE I	Make a poster with your own message.
A	POSTER NCSU WOLF	Makes a poster of the NCSU wolf mascot.
A	POSTER PIZZA MAN	Makes a poster of a little pizza man.
A	SPACE FILLING CURVES	Draws Hilbert or Sierpinski curves in various degrees.

DISK NO 013		ART
I	ART DEMO 3	Patterns of triangles, tunnels, and squares.
I	ART KALEIDOSCOPE 2	Changing kaleidoscope effects.
I	ART LADY BUG	A lady bug, (lo res).
I	ART MOOSE	A moose, (lo res).
I	ART ONE LINER	Display of vertical and horizontal lines.
A	ART ONELINER II	Changing graphics of radiating lines.
I	ART PARROT	Colorgraphics of a parrot, (lo res).
I	ART RAT	A rat, (lo res).
I	ART SLIDE SHOW	Graphics of a space shuttle and a space ship.
I	ART TRAINS	A train, (lo res).
A	ART TRIANGLES	Triangles of changing colors.

I	INSPIRATION	Display of a quote.
A	PICTURE LOADER	Loads any picture on the disk.
I	POSTER SNOOPY	Prints a poster of Snoopy.
I	TYPE CHARACTERS ?	Types a hi res character font.

DISK NO 014		ART
A	ART BOX PADDLES	Graphics of a cube.
A	ART BOXES	Small squares within a large square.
A	ART BOXES 3D	Views of various 3-D boxes.
A	ART BY BEN	Spiraling pentagon.
A	ART CURVES	Graphics of web-like curves.
A	ART FIREWORKS	Colorgraphics in fireworks patterns.
A	ART IDIOT DELIGHT	Enlarging circle formed by a rotating line.
A	ART JUMP	Man jumping, smiling, and raising his arm.
A	ART LINES	Colored, vertical and horizontal lines in random pattern.
A	ART MULTICOLOR II	Graphics of 4 rotating straight lines.
A	ART STARS	Blinking spots.
A	ART TESSERECT	Views of various compartmented boxes.
A	ART TRIANGLE ILLUSION	Illusion of a 3-D triangle changing colors.
A	ART TWIST I	Graphics of 4 rotating straight lines.
A	AUTO SPACE WAR I	Lo res target shooting.
A	BARN 3D	Barn shown in normal, telephoto, and wide-angle views.
A	CHARACTER TABLE GENERATOR	Hi res character table generator.
A	CHARACTER TABLE NOTE	Instructions to refer to the Apple manual.
A	DOLLAR COPY	Hi res graphics of a dollar bill.
A	PIE CHART I	Pie chart showing percentage of distribution.
A	PIE CHART II	"
A	POSTER SNOOPY	Prints a poster of Snoopy.
A	SAVE A SKETCH	Draw and save sketch made from keyboard and paddle.
A	SHAPER	Facilitates drawing shapes.
A	SHAPER INSTRUCTIONS	Instructions for SHAPER.
A	STAR SHIP	Displays different views of a space ship.
A	SURFACE 3D	Plots a 3-D mathematical surface.

DISK NO 015		ART
I	ART DISPLAY COLORS	Continuously moving colorgraphic plaids.
I	ART WINDMILL	Colorgraphics of a windmill.
I	CONTOURS	Selection of 11 contours.
A	PICTURE LOADER	Loads the above contours individually.

DISK NO 016		ART
A	ART ALIGN	Choice of vertical, horizontal, crosshatch, and colored bars.
A	ART BARS	Overlaying, vertical and horizontal bars.
A	ART CIRCLE	Circle formed by overlaying color squares.
A	ART DEMO	Kaleidoscope effects of vertical and horizontal lines.
A	ART DIVERGING CIRCLES	Changing, spiraling lines.
A	ART DIVERGING OCTAGONS	Octagons diverging.
A	ART DOUBLE CROSS	Moving figure-8's.
A	ART DOUGS THEME	Pinwheel patterns formed by pivoting line.
A	ART DRIFTING CIRCLE	Spiraling circle drifting across screen.
A	ART DRIFTING OCTAGON	Spiraling octagon drifting across screen.
A	ART ELEPHANT	Elephant head in various manipulated modes.
A	ART FIGURE EIGHT	Patterns of a figure-8, (colorgraphics).
A	ART HORIZON	Moving, horizontal lines.
A	ART IBM	Display of the IBM logo.
A	ART OCTAL EIGHT	Colorgraphics of an octal figure.
A	ART ONELINER VII	Slow display of a crater in 3-D.
A	ART SPACE	Simulates movement through outer space.
A	ART SUPER KALIED	Colorgraphics of a changing kaleidoscope effect.
A	ART TWIST II	Colorgraphics of 4 rotating, straight lines.
A	ART XMAS CARD	Graphics of a man trimming a tree.
A	AUTO SPACE WAR II	Target practice in space.
A	BILLBOARD MOTHER	Sideways "M" formed by MOTHER 4 times.
A	GRAPHIC SWITCH	Colorgraphics of flashing neon light effects.
A	GRAPHICS TABLET	Graphics editor.
A	HI-RES TEXT DEMO ?	Demo of hi res capabilities.
A	HIGHER HIRES	Shows how to use a 560 by 192 resolution screen.
A	HIRES SKETCH	Graphics editor.
A	LIFE	Create cell colonies and watch them grow. See if they can survive mutations.

A	LIFE LEADER	Select and manipulate a pattern or create one.
A	PICTURE LOADER	Loads a file from the catalog.
A	PLOT POURRI	Plots of functions using hi res graphics.
A	POSTER ?	Design and print a poster.
A	POSTER BANNER I	Prints a poster banner with message.
A	POSTER LOVE II	Prints "LOVE" logo with a message.
A	RUBBER APPLE	Bouncing design made with "APPLE USER GROUP" logo.
A	SHAPE GENERATOR	Simple shape table generator using a text file of another shape editor program.
A	SHAPE INSTR	Instructions for using SHAPE TABLE EDITOR and GENERATOR.
A	SHAPE TABLE EDITOR	Edits generated shape tables.
A	SKYWRITER	Drawing routine using vectors to plot.
A	SKYWRITER I	Draws patterns with circling line.
A	SKYWRITER II	Draws patterns with circling octagon.
A	SKYWRITER INSTR	Instructions for the SKYWRITER programs.
A	SKYWRITER SNOOPY	Uses data table to control SKYWRITER routine.
A	TV PATTERN GENERATOR	Select dot, crosshatch, or crosshair pattern for the screen.

DISK NO 017		**ART**
I	ART BEGINNING	Plots circles.
I	ART ENTERPRISE	Lo res graphics of an attack on Star Trek's Enterprise.
I	ART HYPNOTIZER	Changing graphics with bars and dots.
I	ART MERRY XMAS	Lo res display of "MERRY CHRISTMAS".
I	ART TIME TUNNEL	Colorgraphics of tunneling effects.
I	BILL BUDGE 3D DEMO	Hi res, 3-D graphics of spaceship in flight.
I	HIRES PAK 1	Hi res graphics of demos: doily doodle, paddle doodle (requires joystick), spirals (3-D) and biorhythms.
I	SHAPE MAKER	Creates shapes in lo res, allows the computer to write a series of plots.

DISK NO 018		ART-FIRE ORGAN
B	ABOUT ARTHUR	Introduction to"Arthur", a documentation system to create"self-running" files and a word processing system for internal files.
B	ABOUT BROOKE BOERING'S SCORES	Descriptions of Brooke Boering's scores.
B	ABOUT CEEMAC	Description of Ceemac, a language for high-level use in creation of visual compositions.
B	ABOUT JP MCMILLAN'S SCORES	Descriptions of graphics accompanying JP McMillan's scores.
B	ABOUT VAGABONDO	Description of FIRE ORGAN, a visual composition language.
B	ABOUT W. MIKE BENDIK'S SCORES	Descriptions of Mike Bendik's visual compositions.
I	APPLESOFT	Beautiful hi res colorgraphics using FIRE ORGAN program.
B	CEEHI	Used by FIRE ORGAN.
B	CEELO	Hi res colorgraphics.
A	FIRE ORGAN (C)	Similar to graphics in Applesoft.
B	PDOC	Documentation for FIRE ORGAN.
I	START.I	Runs FIRE ORGAN.

DISK NO 019		ART
A	ANNOUNCEMENTS	Instructions for Dr. Cat's graphics disk.
A	CAT-GRAPHIX	Colorgraphics demo of spins, circles, and boxes, (hi res). Graphics editor with instructions.
A	CHAR-EDIT 3	Font editor.
A	CIRCLES I	Five programs used by LINESET EDITOR.
A	CLEAR DEMO	Three programs used by LINESET EDITOR.
A	DOCUMENTATION	Documentation of Dr. Cat's Graphix.
B	EDIT.OBJ	Editing program.
B	GRAPHIX II	Used by DRAWIT.
A	HI-RES DAZZLER	Manipulate an assortment of graphics with flip delay and gravitational shifter.
A	KALEID 4	Continuously changing kaleidoscope effect.
A	KINETIC 1	Action of a bouncing, rotating straight line.
A	KINETIC 2	Action of 2 bouncing, rotating straight lines.
A	LINESET EDITOR	Graphics editor with many demos, (hi res).
A	MESSY CIRCLES	Used by LINESET EDITOR.
A	QUIXOTIC 1	"

A	S2	Step table display.
A	SEA OF GREEN	Changing, blinking spots.
A	SERENDIPITY	Used by LINESET EDITOR.
A	SQUARE 4	Graphics of a web of straight lines, (hi res).
A	SQUARE 5	Used by LINESET EDITOR.
A	STAINED GLASS	Colorgraphics of stained-glass patterns.
A	TABLE MAKER	Graphics table maker.
A	UPGRADE	Addendum to DOCUMENTATION.
B	YZ	Changing colorgraphics, (hi res).
B	YZ3	Colorgraphics in blocks, make changes from the keyboard, (hi res).

DISK NO 020 **ART-SPARKEE**

This is the second visual disk from Vagabondo. The first is called FIRE ORGAN—DISK NO 018. Both are written using Ceemac Language System. SPARKEE features works by the 3 artists responsible for FIRE ORGAN, as well as works by 4 new Ceemac composers.

A	HELLO	Message about SPARKEE.
A	START.A	Runs CEEHI.
I	APPLESOFT	"
I	START.I	Beautiful, changing colorgraphics, (hi res).
B	CEEHI	Instructions to use SPARKEE.
B	CEELO	Beautiful, changing colorgraphics, (hi res).
A	SPARKEE	More hi res colorgraphics, some with sound.
B	PDOC	Instructions to use SPARKEE.
B	@LINER NOTES	Description of visual score used in SPARKEE.
B	@CEEMAC	Description of CEEMAC support system.
B	@CEEMAC SUPPORT	"
B	@ABOUT ONE-KEY DOS	Describes one-key DOS, a set of compatible modifications that improves and enhances screen-handling, and the catalog display function of DOS.

Note: This disk is personal domain software.

DISK NO 021		ART
A	CASTLE	Display of a castle in hi res with some animation.
A	SPIROGRAPH	Display of spirograph graphics.
A	CHECKERBOARDS	Lo res display of checkerboard effects.
A	ABOUT.PICTURE.PACKER	Instructions for PACKER.UNPACKER.
A	PACKER.UNPACKER	Reduces hi res pictures for storage.
B	PACKED.PICT	"
A	PAGE 1	Demonstration of flipping in hi res.
A	PAGE 2	"
B	MAN	"
B	HIRES CHAR	"
B	CHAR TABLE	"
A	ONE-PAGE.PORKYJUMP	Demonstration of flipping used in jumping Porky Pig.
A	TWO-PAGE.PORKYJUMP	"
B	HORSE&PIGS SHAPE	"
A	SHAPE.DISPLAY	Displays the contents of SHAPE TABLE NUMBERS.
A	SQUARES	Display of squares contained in NUMBERS.
B	NUMBERS	"
A	HIRES COMPILER DOC	Hi res compiler documentation.
A	HIRES SHAPE COMPILER	Create shape tables using the keyboard.
A	HIRES SHAPE FORMER	"
A	SHAPE MOVER	Move an"O", using paddles.
A	HIRETEXTDEMO/3	Documentation for HIGH-RES-TEXT/3.
B	HIGH-RES-TEXT/3	"
B	DEMOTEXT/3	"
T	DEMOTEXT/3	"
A	CHARACTERS	Character generating program for HIGH-RES-TEXT/3.
B	ROMAN	"
A	HIRES NOFLASH	Hi res demo that does not flash.
B	FLIPPER	"
B	HI-RES DUMP.EPSON MX-80	"
B	HIRES DUMP	"
B	INVERT HI-RES PAGE 1	"
A	TRICOLOR GRAPHICS	Display of various hi res colorgraphics.
A	THREE-D APPLE PRISONER	3-D game.

A	SHAPE TABLE ASSEMBLER	Merges shape tables into 1 shape table.
A	HIDDEN.LINE.3D	Plots 3-D functions with a hidden line subroutine: tower, polygon, polygram, spiral, flower, and others.
A	GEOMETRY.MENU	Display of 11 different, geometrical figures.
A	DUMP INSTRUCTIONS.A	Instructions for Epson hi res dump program.

DISK NO 022		ART
A	ABE PIC	Draws a side view of Abraham Lincoln.
I	ANIMATIONS	Four graphic displays; "The Little Train", "Over the Rainbow", "Fireworks", and "Clown".
A	APPLESOFT SHAPE MAKER	Generates shape table based on matrix inputted.
A	BARN	Displays 3-D barn from various points of view.
I	COLOR DEMO I	Menu driven program with 10 color and shape demonstrations.
I	COLOR SKETCH III	Sketch lo res graphics with paddles.
I	CURVES	Creates a wide range of graphic designs and patterns.
A	EASTER EGG	Generates a colorful pie shaped design.
A	FIREWORKS	Simulated fireworks display in hi res graphics.
A	GRAPHICS 3-D	Instructions.
A	HGR DEMO	Draws 7 different hi res displays, menu driven.
B	HI-RES CHARACTER DEMO	Draws a sine curve, Y = sin(X).
A	HYPERBOLOID	Three-dimensional display of hyperboloid.
B	INTERGER HI-RES	Draws a random shape in hi res, then draws the same in lo res.
I	KALEIDOSCOPE	Display of colors and patterns, (lo res).
I	KALEIDOSCOPE #2	Colorgraphics with kaleidoscope effects, (lo res).
A	MAGIC PAINTBRUSH	Draw, fill in, or paint pictures, (hi res).
A	MOIRE PATTERN	Intricate hi res color displays.
A	SKYWRITER	Drawing routine using a paddle. Airplane draws by making a trail of smoke across the screen.
A	SKYWRITER (INSTRUCTIONS)	Instructions for SKYWRITER.
A	SKYWRITER (ONELINER 1)	Draws patterns with circular line.
A	SKYWRITER (ONELINER 2)	Draws patterns with circular octagon.
A	SKYWRITER (SNOOPY)	Demonstration of the use of data table to control SKYWRITER.
A	STAR PATTERN	Changes patterns with the touch of a key, hi res color display.

A	SURFACE	Plots 3-D mathematical surfaces.
A	TUNNEL VISION	Graphic design that visually gives off a tunnel effect.
A	TWENTYONE COLORS	Color demonstration of the varieties and shades possible.
A	TWO 3-D SHAPES	Creates 2 hi res designs that give the impression of 3-D.

Astronomy

These two disks supply the amateur astronomer with valuable tools to photograph a celestial object, calculate the orbit of a satellite, or just stargaze into the sky. Some programs serve as tutorials, others display graphics, or perform calculations.

DISK NO 028		ASTRONOMY
A	ASTRONOMY EXPOSURES	Gives exposure times for photographing common celestial objects, e.g.—moons and planets.
I	ASTRONOMY TUTOR	Simple tutorial program about solar system.
A	CALENDAR MOON AGE	Calculates age of moon on any given date.
A	EPHEMERIS	Calculates distance and position of sun and planets in relationship to Earth on any date.
A	GREAT CIRCLE BEARINGS	Calculates great circle bearings in statute miles and kilometers.
A	JUPITER MOONS	Visual display of 4 of Jupiter's moons at any given time and date.
A	MOON FINDER	Calculates position of moon according to any latitude and longitude.
A	OSCAR	Orbit information of time and longitude on Oscar 7, Oscar 8, Russian, and Tiros N.
A	OSCAR ORBIT PERIODS	Calculates orbit period of the satellites Oscar 6 and Oscar 7.
A	OSCARLOCATOR	Aids in satellite location time and longitude from a given location with a range of dates.
A	OSCARLOCATOR FILE INIT	Update for OSCAR.
A	OSCARLOCATOR INSTRUCTIONS	Documentation for OSCARLOCATOR.
A	PLANET LOCATOR	Locates the position of the Earth and planets visible to the naked eye, in time increments.
A	SUNRISE AND SET	Rising and setting times of the sun, 1978 through 1981.
A	URSA STAR TIME	Tells time from display of star configuration.

DISK NO 029		ASTRONOMY
A	SATELLITE CALENDAR	Calculates and prints orbit calendar for RS-1, RS-2, P76-5, AO-7, and AO-8.
A	SATELLITE COMMON VIEW	Calculates common view time between 2 ground stations. Prints azimuth and elevation for ground antenna and sub-satellite.
T	SATELLITE DATA	Latitude and longitude for circular orbit satellites.
A	SATELLITE DATA READER	Data table for satellites.
A	SATELLITE ELLIPTICAL ORBIT	Calculates the time, sub-satellite point on Earth, azimuth and elevation for a ground station antenna for elliptical and circular orbit satellites.
A	SATELLITE POINTING	Calculates time, azimuth and elevation for the latitude and longitude for circular orbit satellite, using equal time steps.
A	SATELLITE REAL TIME	Calculate the sub-satellite point, and ground station's azimuth and elevation, all as a function of the real time clock.
A	ASTRONOMY	Plots any of the constellations listed below.
A	CONS INSTR	Instructions for ASTRONOMY.
A	CONSTELLATION	Plots the following constellations: Sagittarius, Cygnus, Leo, Ursa Major, Pisces, Taurus, Gemini, Virgo, Aquarius, Aquila, Pegasus, Lyra, Scorpio, Orion, Aries, Hercules, Cancer, Libra, Bootes, Capricorn, Perseus, Canis Major, Auriga, Ursa Minor, Draco, Cetus, Cepheus, Corona Borealis, Ophiuchus.

Aviation

These two disks include programs of interest to the aviation enthusiast who flies or simply enjoys aircraft as a hobby. One disk provides the tools necessary to create a comprehensive aircraft database. The other contains programs which can display and print pictures of eight categories of aircraft.

DISK NO 034		AVIATION
A	AIRCRAFT DATABASE	Database of different types of aircraft.
T	COMMERCIAL AIRCRAFT	Database file of commercial aircraft.
A	FILE CABINET IV	Creates new database files.
T	GENERAL INFORMATION	Information about the database.
T	MODERN COMBAT AIRCRAFT	Database file of modern combat aircraft.
T	SAILPLANES	Database of sailplanes.
T	SINGLE ENGINE AIRCRAFT	Database of single-engine aircraft.
T	WWII BOMBER AIRCRAFT	Database of WWII bomber aircraft.
T	WWII FIGHTER AIRCRAFT	Database of WWII fighter aircraft.

DISK NO 035		AVIATION
I	AIRCRAFT CATALOG	Descriptions and pictures of 3 jet fighters.
A	AIRCRAFT PERFORMANCE	Provides aircraft designers with performance calculations.
A	AIRCRAFT SLIDE SHOW	Shows 4 aircraft for each of the categories below.
B	COMMERCIAL AIRCRAFT	"
B	FOREIGN FIGHTERS	"
B	GENERAL AVIATION	"
B	HOMEBUILT AIRCRAFT	"
B	MODERN US FIGHTERS	"
B	US BOMBERS	"
B	US JET FIGHTERS	"
B	US WWII FIGHTERS	"
A	SLIDE SHOW TO SILENTYPE	Allows slide show to be printed on a silent-type printer.
A	RNAV GLIDE SLOPE	Calculates glide slope, horizontal distance, MDA to map, and altitude at stepdown fix.

Business

These disks include many useful programs, not only for business, but for the home as well. Business programs can perform functions such as form a database, create a mailing list and print labels, calculate and print a financial statement, and do the company payroll. With the programs for the home, the user can make a phone directory, calculate vacation expenses, budget a household, and do income taxes.

DISK NO 038		BUSINESS-HOME MANAGEMENT
A	CHECKBOOK BALANCER	Helps reconcile a bank statement.
A	HOME.COMPUTER.INVENTORY	Keeps an inventory of equipment.
A	TRIP COST ANALYSIS	Estimates the expenses of a projected trip.
A	BUDGET ANALYZE	Calculates ratios, runs totals of a budget.
A	BUDGET EDIT	Edits data created by BUDGET ANALYZE.
A	BUDGET INPUT	Calculates total income, expenses, overhead, and expense to income ratio.
A	BUDGET PLOT	Hi res plot of a budget.
A	BUDGET TRACKER INSTR	Balances your checkbook.
A	ADDRESS LIST	Form a database for a mailing list.
A	ELECTRICITY COST (C)	Calculates cost per item per month in a household.
A	WATER CONSERVATION	Tells gallons of water used per day in a house.
A	CALENDAR	Displays monthly calendar or calculates days between dates.
A	METRIC CONVERSION	Converts 18 types of measurements to and from metric.
A	RECIPE BOX	Use as a recipe database by retrieving, adding, and listing recipes.
A	MILES PER GALLON RECORD	Figures mileage and cost per gallon.
I	CALCULATOR START	A talking calculator that says each number as it is typed.
I	LETTER WRITER	Formats a short letter.

DISK NO 039		BEST OF BUSINESS
A	ADDRESS LIST	Form your own database for a mailing list.
A	CHECKBOOK BALANCER	Helps reconcile your bank statement.
A	GEN LEDGER	Creates a general ledger for a small business.

A	PRINT G/L	Prints a financial statement from GEN LEDGER.
A	KEOGH SAVINGS PROGRAM	Calculates your earnings by adding compounded interest to principal.
I	LETTER WRITER	Formats a short letter.
A	MATRIX MAKER	Create a matrix.
A	MONEY MANAGEMENT	Fifteen different financial programs: Amortization Schedule Future Value of Ordinary Annuity Present Value of Ordinary Annuity Payments Required to Pay Off Debt Payments Required for Future Value Term of Annuity for Future Value Term of Annuity to Retire Debt Face Value of Discounted Paper Proceeds of Discounted Paper Income from Investment Effective Annual Interest Rate Interest on Investment Present Value of a Fixed Debt Term Required to Reach Amount Declining Balance Depreciation
A	MONEY MARKET	Calculates and plots yields.
A	PAYROLL	Computes various payroll data: payroll history, payroll totals, and others.
A	STOCK PORTFOLIO VALUATION	Uses 5 methods of portfolio valuation.
A	TREND LINE ANALYSIS	Generates a plot with given data, (hi res).
A	CHECK WRITER	Write formatted checks with your information.
A	LABEL.INTRO	Label printing program.
A	LABEL PRINTER V1.1	"

DISK NO 040		BUSINESS
A	ADDRESS LIST	Form a database for a mailing list.
A	ADDRESS BOOK	Form an address list, print, change, and delete entries.
A	CHECK BOOK BALANCER	Balances checkbook, and prints results.
A	PRINT G/L	Prints a financial statement from the ledger of a small business.
A	GEN LEDGER	Create a general ledger for a small business.
A	DPRING	Prints a D file created by Visicalc.
A	FINANCE I	Calculates interest rates, balloon payments, and amortization schedules.

A	FILE CABINET	Forms data files: search, change, delete, and print entries.
A	LOAN AMORTIZATION TABLE	Prints amortization table using various terms of a loan. Requires two disk drives.
A	FAST CABINET.48	Fast database program.
A	DOS ADDRESS BOOK (7.9)	Name and address file that can print mailing labels.
A	CHECK BOOK TRANSACTIONS	Running balance of deposits and checks.

DISK NO 041		BUSINESS
A	WEEKLY PAYROLL.EPSON	Computes, updates, and prints weekly payroll.
A	CHECKBOOK RECONCILIATION	Does all calculations to reconcile statement.
A	CHEQUE BOOK	Simulates an actual checkbook.
A	FINANCIAL PROGRAMS	Fifteen financial programs which include: income from investment, face value of discounted paper, declining-balance depreciation, and future value of an annuity.
A	CARLOANS	Calculates payment, interest, and total loan for 3-4 year loan of 10-19%.
A	BIRTH/ANNIVERSARY LIST	Database program for birthday, anniversary, and graduation dates.
A	LOAN PROGRAM	"
A	AMORT SCHED.EPSON	Loan ammortization program.
A	ELECTRONIC.LIBRARY	Database program for magazine articles.
A	HOME.COMPUTER.INVENTORY	Keeps an inventory of equipment.
A	DECISION.MAKER	Aids in decision making based on criteria and choices.
A	LABEL PROGRAM	Prints address labels.
A	CHECKBOOK BALANCER	Reconcile a bank statement.
A	MAIL LABELS	Form a mailing list and manipulate the data in various ways.
A	PAYMENT CALCULATOR	Calculates payments on loan of various rates and maturities.
A	LABEL.INTRO	Label printing program.
A	LABEL PRINTER V1.1	"
A	PLOTTER 1.3	Prints a horizontal bar graph on an 80 column printer.
A	MONEY MARKET	Calculates and plots yields.

DISK NO 042		BUSINESS
A	ANNUITY PRINCIPAL & INTEREST	Calculates monthly figures.
A	ANNUITY REGULAR DEPOSITS	Calculates future value of an annuity.
A	BOND PRICE & INTEREST	Calculates figures based on the value and maturity of a bond.
A	BOND VALUE	Calculates figures based on the redemption value and maturity.
A	BUDGET MONTHLY	Includes 8 categories for a monthly budget.
A	DECISION MATRIX	Create and print a table of weighted values to aid in decision making.
A	FINANCIAL PAK	Examines investments, savings and annuities, mortgages and loans, and depreciation.
A	INVESTMENT ANNUITY FORECASTS	Calculates future values based on factors such as interest, amounts, and trends.
A	KEOGH SAVINGS PROGRAM	Calculates earnings by adding compounded interest to principal.
A	LOAN AMORT SCHEDULE	Computes loan payments.
A	LOAN DIRECT REDUCTION	Calculates the value of a loan at a determined point in time.
A	LOAN INTEREST	Calculates accrued interest compounded daily.
A	MARKET EVALUATOR PAK	Calculates value of portfolio stocks, put and call options, and ROI on an option straddle.
A	MORTGAGE CALCULATION	Calculates mortgage payment schedule.
A	REGULAR DEPOSITS I	Calculates value of deposits by term and rates.
A	SALES TAX AT 6%	Calculates sales tax for any given amount.
A	SECURITY ANALYSIS	Analyses the value of securities using the capital asset pricing model.
A	SECURITY ANALYSIS COPY DATA	Copies information from tape placed in the tape recorder.
A	SIMPLE INTEREST	Calculates future value of an investment.
A	STOCK OPTION ANALYSIS	Analyses the risks of a stock option.
A	STOCK OPTION COVERED HEDGE	Based on microcomputer's stock options.
A	STOCK OPTION PRICING I	Prices stock using the Black-Scholed formula.
A	STOCK OPTION PRICING II	Prices options with discontinuous returns.
A	STOCK PORTFOLIO VALUATION	Uses 5 methods of portfolio valuation.
A	STOCKS	Calculates intrinsic value, required time at a given growth rate, and required future P/E ratio of a stock.
A	TRIP COST ANALYSIS	Estimates the expenses of a projected trip.

DISK NO 043		BUSINESS
I	LETTER WRITER	Formats a short letter.
I	LETTER WRITER ENHANCE	"
I	PHONE LIST	List, add, or remove names and phone numbers in a directory.
I	REAL ESTATE PLOT	Saves addresses, describes properties, and shows their location in a plot map.
A	STOCK MONITOR I	Saves information on a group of stocks, bonds and cash reserves.
A	STOCK MONITOR II	"
A	TREND LINE ANALYSIS	Generates a hi res plot from given data.
A	VISICALC COORD FORMULAS	Lists the formulas for the coordinates in a stored Visicalc file.
A	VISICALC D FILE PRINTER	Prints a D file created by Visicalc.
A	VISICALC FORMULAS	Lists the formulas and prints the coordinate locations.
A	VISICALC FORMULAS INSTR	Instructions for VISICALC FORMULAS.

DISK NO 044		BUSINESS
A	APARTMENT MORTGAGE	Computes the component of profit related to the purchase of an apartment building.
A	BANKING AND FINANCE	Contains routines which examine investments, savings, annuities, mortgages, depreciation, loans, and amortization.
A	BUSINESS FINANCES	"
A	CHECK STUB	Balances your checkbook.
A	HOUSEHOLD EXPENSES PROFILE	Saves list of expenses under 28 categories.
A	INCOME TAX 1040 FOR 77	1040 Federal tax program that includes schedule A, B, C, D, and F.
A	INVENTORY COMPANY	Saves company reports such as activity, minimum quantity search, and inventory listed by class and vendor.
A	INVENTORY COST FILE ENTRY	Computes cost of inventory items.
A	INVENTORY HOME I	Keeps an inventory.
A	INVENTORY MODEL	Several inventory control programs which aid in quantity and stocking decisions.

A	INVENTORY SHORTEST	Records item and cost.
A	INVENTORY.DOC	Instantly updates or totals inventory and value.
A	STOCK MARKET FORECASTER	Forecasts future stock values based on daily market data.
A	STOCK VALUATION	Stock valuation using the Molodovsky method.

DISK NO 045		BUSINESS
A	ANNUITY	Calculates future value of an annuity.
A	CHECK BOOK BALANCER	Balances your checkbook.
A	CHECK WRITER	Saves information on checks written.
A	DEPRECIATION AMOUNT	Calculates asset depreciation.
A	DEPRECIATION RATE	Calculates depreciation rate.
A	DEPRECIATION SCHEDULES	Straight line, sum of years digits, and declining balances methods.
A	DEPRECIATION STRAIGHT	Calculates depreciation using straight line method.
A	DISCOUNT COMMERCIAL PAPER	Computes actual value of securities bought at a discount.
A	HOUSE SALES	Calculates actual profit or loss from the sale of property.
A	INCOME TAXES	Calculates taxes due on taxable income.
A	INTEREST EARNED	Computes interest with input of deposits, withdrawals, etc..
A	INTEREST RATE	Calculates effective rate on investments.
A	INVENTORY HOME II	Saves, edits, files, reviews, and inputs inventory items.
A	INVESTMENT FOR WITHDRAWALS	Computes minimum investment for desired future withdrawals.
A	INVESTMENT FUTURE VALUE	Determines future value of an investment.
A	LEASE COMPUTATION	Calculates monthly leasing rate for 2 types of leases—10% residual and full payout.
A	LIFE MGMT AND FINANCES	Personal budget with 52 categories of expenses and incomes.
A	LIFE MGMT TEXT ORGANIZER	Organizes text in outline form.
A	LOAN BALANCE	Calculates remaining balance on a loan.
A	LOAN INTEREST RATE	Calculates annual interest rate on a loan.
A	LOAN LAST PAYMENT	Calculates the last payment due on a loan.
A	LOAN PRINCIPAL	Calculates principal amount on a loan.
A	LOAN REGULAR PAYMENT	Calculates regular payments on a loan.
A	LOAN TERM	Calculates period necessary to pay off a loan.

A	MORTGAGE COMPUTER	Computes monthly mortgage payments and total amount paid at the end of a loan term.
A	MORTGAGE TABLE	Calculates mortgage amortization table.
A	PAYROLL	Stores employee data, calculates wages, stores payroll history and payroll totals to date.
A	REGULAR DEPOSITS II	Calculates number and amount of periodic deposits necessary to accumulate a determined amount at a specific rate.
A	REGULAR WITHDRAWALS	Calculates the amount of money that can be withdrawn each month given a present amount invested at a specific rate of interest and specific time term.
A	SALVAGE VALUE	Computes the salvage value of an asset.
A	SAVINGS GROWTH	Calculates the present and future values of an investment.
A	SURVEY DATA REDUCTION	Receives information necessary to construct a quandrant to calculate area in square feet and acres.
A	SYSTEM RELIABILITY	Calculates a systems reliability rate based on operating time, and failure rate.
A	TREASURY BILL VALUATION	Calculates the price per $100 and dollar value of U.S. Treasury bills.

DISK NO 046		BUSINESS
A	AMORTIZATION SCHEDULE PRINTED	Computes loan payment schedule and periodic loan balance amount.
A	AMORTIZATION SCHEDULE SCREEN	"
A	COMPOUND INTEREST TABLES	Calculates figures for values of 7 functions.
A	ELLWOOD GRAPH POINTS	Calculates changes in value which will occur at different capitalization rates.
A	HOME ACCOUNTING	Home accounting system for charge accounts, purchases, and record keeping.
A	INCOME APPROACH RATE PRINTED	Calculates "R", an overall capitalization rate for mortgage equity premise.
A	INCOME APPROACH SCREEN	Calculates net operating income on rental property.
A	INCOME TAX	General program to use with IRS 1040 form.
A	INVENTATOR	Receives commands to save, list, update, read from disk, and print items.
A	NAMES SEARCH	Makes roster of 255 names and addresses.
A	NET PRESENT VALUE	Calculates net present value of investments.

A	NET PRESENT VALUE IRR	Calculates intended rate of return using cash flow returns.
A	NPV % CHANGE INCOME	Computes investment net present value.
A	NPV % CHANGE INCOME IRR	Calculates income increase at constant annual percentage.
A	NPV % CHANGE INCOME PR	Same as above, also prints automatically.
A	OVERALL RATE PRINTED	Calculates"R", an overall capitalization rate for mortgage equity premise.
A	OVERALL RATE SCREEN	Calculates an overall capitalization rate using depreciation figures.
A	PAYMENT SCHEDULE	Calculates the amount and number of monthly payments.
A	TAX DEPRECIATION SCHEDULE	Computes depreciation by sum of digits or declining balance.

DISK NO 047		BUSINESS
A	ALL ACCOUNTS	Shows all accounts receivable and gives length of time.
A	BILLS	Creates data to be used for all accounts.
A	CLEAN UP	Deletes ALL ACCOUNTS file above.
A	DATA BASE	Simple database that stores up to 500 records with a maximum of 16 fields.
A	FILE CABINET I	Database that stores 2000 records.
A	FILE CABINET II	Database that stores 2300 records.
A	FILE CABINET III	Database program, improved version of FILE CABINET I.
A	FILE CABINET IV	Improved version of FILE CABINET III, stores 1066 records.
A	INDIVIDUAL ACCOUNTS	Does individual accounts receivable.
T	JOBWORK	"
A	NEW	Makes a backup file of ALL ACCOUNTS data.
A	NOMINAL INTEREST RATE	Computes rate of interest earned.
A	PAY	Modifies ALL ACCOUNTS data file.
A	PRINT ALL ENTRIES FOR 1#	Prints ALL ACCOUNTS data files.
A	PROPERTY MORTGAGE	Calculates monthly payment amount, total interest, and price per acre.
A	STATEMENT INVOICE	Stores billing invoices.
A	UTILITY TO WRITE BLANK PFILE	Creates a data file for ALL ACCOUNTS.
A	UTILITY WRITE EMPTY DISK	"

DISK NO 048		BUSINESS
A	APPLE FILE (C)	Uses a disk as a card file.
A	BUDGET ANALYZE	Calculates ratios, runs totals of a budget.
A	BUDGET EDIT	Edits data created by BUDGET ANALYZE.
A	BUDGET INPUT	Calculates total income, expenses, overhead, and expense to income ratio.
A	BUDGET PLOT	Hi res plot of a budget.
A	CHECK BOOK	Calculates checkbook balance.
A	CHECK BOOK INSTR	Helps balance a checkbook.
A	FAMILY FINANCE (C)	Calculates totals and balances for 17 categories.
A	GEN LEDGER	Calculates profit and loss and balance sheet data.
A	GEN LEDGER PRINTER	Prints financial reports.
A	MATRIX MAKER	Creates a matrix.
A	TEXT FILE READER	Reads any text file.
A	TITLE SLIDES	Produces, receives, and stores text images.

DISK NO 049		BUSINESS
A	A DATA BASE MGMT PGM (C)	Extensive instructions are given here on the use of this database program. Creates, retrieves, transfers copies and merges files. Appends new data, updates, deletes, inserts, searches and sorts. Instructions are given to debug such problems as running out of memory.
A	HELP	Same as above file.
A	MERGE	Part of A DATA BASE MGMT PGM (C).
A	EDIT.FILE	Edits database files.
A	CREATE.ADD	Prints files created by A DATA BASE MGMT PGM (C).
A	SEARCH.SORT	Finds and sorts A DATA BASE MGMT PGM (C) files.
A	TRANS.COPY	Compiles, prints, and saves a transcript from data created by A DATABASE MGMT PGM (C).
A	DISK TO TAPE TRANSFER	Transfers files from the disk to tape.
I	PGM TRANSFER 1	Single disk drive transfer program.
I	PGM TRANSFER 2	Dual disk drive transfer program.
I	PGM TRANSFER INSTRUCTIONS	Instructions for PGM TRANSFER 1 and 2.

DISK NO 050		BUSINESS
A	ADDRESS LEDGER	Manages up to 130 files: prints, changes, adds, searches or deletes.
A	ANNUAL DEPRECIATION	Calculates straight line depreciation.
A	CHECK CHECK	Balance a checkbook on a CRT or a printer.
A	CHECK WRITER	Write formatted personalized checks.
A	CHECKBOOK	Checkbook balance program.
A	DECISION MAKER	Aids in decision making.
A	GENERAL LEDGER	Prints a ledger for a small business bookkeeping system.
A	G/L PRINTOUT	Prints the financial statement of a small business.
A	HOUSE SALES	Determine the loss or profit from property or house sale.
A	MAIL LABELS	Creates various mailing lists.
A	MONEY MANAGEMENT	Fifteen different financial programs: future value of annuity, amortization schedule, interest on investment, and many others.
A	MORTGAGE TABLE	Makes mortgage amortization table.
A	PAYROLL	Computes various payroll data: payroll history, payroll totals, and others.
A	PERSONAL FINANCES	Keeps track of household finances.
A	PHONE DIRECTORY	Database for phone directory—search by first or last name.
A	SIMPLE LOAN	Calculates monthly payment and cost of loan.

DISK NO 051		BUSINESS
A	BASICALC	Applesoft spreadsheet program, compatible with some Visicalc files.
A	BASICALC.COMPILED	"
A	BASICALC.DOC	BASICALC documentation.
A	VISICALC FORMULAS INSTR	Instructions for VISICALC FORMULAS.
A	VISICALC FORMULAS	Lists formulas for the coordinates in a stored Visicalc file.
A	VISICALC COORD FORMULAS	"
A	VISILIST	"
A	VISICALC FILE CHECKER	Prints Visicalc files.

A	VISICALC D FILE PRINTER	Prints Visicalc D files.
T	COMMISSION SALES EXAMPLE	Visicalc text files example.
T	BOOLEAN LOGIC EXAMPLE	"
A	ALPHACAT	Alphabetizes catalog and copies it back onto the disk.

DISK NO 052		BUSINESS
B	LOGOFILE.1	SOFTGRAPH logo.
B	LOGOFILE.2	"
A	LOGO	"
A	INSTRUCTIONS	Instructions for SOFTGRAPH.
B	DOCFILE	"
A	SOFTGRAPH	Produces bar, line, and chart graphs.
A	DATA EDITOR	Edits data files.
A	PIE CHART	Creates pie charts using SOFTGRAPH.
A	BAR/LINE CHART	Creates bar and line charts using SOFTGRAPH.

Science

A medley of scientific subjects are included on these disks. There are programs dealing with physics, chemistry, and biology. Many of these have graphics, as well as text, and some will test the user on these subjects.

DISK NO 060		SCIENCE
A	BATTERY DEMO	Graphic illustration of the basic elements of a battery.
A	CIRCULAR DICHROISM	Calculates and plots circular dichroism spectrum of a protein, 200-250 nm range.
I	D N A	Description and graphic illustration of DNA.
A	ELEMENTS TABLE	Lists elements by name, symbol, atomic number, and slowly displays the periodic table.
A	ENZYME KINETICS	Analyses, plots data, and calculates KM and Vmax.
A	MOLALITY	Molality and molecular weight determination.
A	MOLECULES OF C H O	Draws a molecule from a given formula.
I	MOLECULES OF CARBON	Draws a molecule for a given formula.
B	RADIO	Binary file used by RADIOACTIVE.
A	RADIOACTIVE	Simulation of radioactive decay, and half-life.
A	TEST MAKER	Write text as either questions and answers or plain text.
A	TEST TAKER	Gives test written in above program.
T	TEST.CHEM CH2	Question/answer for TEST TAKER—measurements.
T	TEST.CHEM NAMES	Question/answer for TEST TAKER—compounds.
T	TEST.IONS	Question/answer for TEST TAKER—ions.

DISK NO 061		SCIENCE
A	RADIOACTIVE	Demonstrates half-life of a radioactive compound.
I	ENGINE	Simulates internal combustion of an engine.
A	HI-RES SOLAR SYSTEM SIMULATOR	Simulates the movements of the planets.
A	CHEMISTRY.DRILL	Chemical elements quiz.
A	PHYSICS.MENU	Teaches projectile and freefall motion.
A	PRO.V	"
A	PRO.VI	"
A	FREEFALL II	"
A	FREEFALL I	"
A	PRO.IV	"
A	JUPITER	Display of Jupiter's moons in motion, (hi res).
A	PRODUCTION OF LIGHT	Shows how light is produced.
A	RUTHER	Simulates Rutherford's experiments on radioactivity.
A	THE.TABLE	Display of the table of chemical elements.
B	ASCII.SET	"
B	PRINT.SET	"
A	ION.TEST	Quiz on recognition and naming of ions.

Education

Whether you are a student, or a teacher, these disks contain something for you. Tutorial, drill, and quiz programs are included. For the student, there are programs which teach math, reading, grammar, history, geography, and science. For the teacher, there are programs which create a class roster, calculate grades, generate a grading curve, and print tests. Other prcgrams include such diverse subjects as speedreading, typing, foreign language, and photography.

DISK NO 062		EDUCATION
I	EMMA'S PROGRAM	Big block letters are displayed as a key is pressed.
I	KIDSTUFF	Ten amusing word and letter games.
A	MY SPELLING TEST	Adaptable tachistoscope with a graphic reward.
A	SPELLING	Tachistoscope program with eight word lists.
A	HANGANIMAL	Hangman game using names of animals, (lo res).
A	LETTER MATCH	Tests recognition of upper and lower case letters.
A	MYSTERY WORD INTRO	Amusing hangman game, can create word lists.
A	ORDERING	Alphabetizing and typing skills drill.
A	WHAT'S MY WORD	Hangman type game with many word lists.
A	LGW	Graphic reward for completing letter match.
A	MYSTERY WORD	Program loaded by MYSTERY WORD INTRO.
T	SAMPLE SPELL LIST	Sample word list used by MYSTERY WORD INTRO.
T	BIRDS	Word list used by WHAT'S MY WORD.
T	CARS	"
T	CARTOON CHARACTERS	"
T	COLORS	"
T	DESSERTS	"
T	FLOWERS	"
T	FRUIT	"
T	ICE CREAM	"
T	HARD COLORS	"
T	SANDWICHES	"
T	SPORTS	"
T	TAME ANIMALS	"
T	TOYS	"

T	TRANSPORTATION	"
T	VEGETABLES	"
T	WILD ANIMALS	"
T	SAMPLE	"

DISK NO 063		EDUCATION-PILOT
S	PILOT -> BASIC	Claim to fame of disk authors.
S	DR. MIKE SMITH	"
S	DEPT. OF ELECTRICAL ENGINEERIN	"
S	UNIVERSITY OF CALGARY	"
S	CALGARY ALBERTA CANADA T2H 1N7	"
S	CALGARY TEACHERS' CONVENTION	"
A	PILOT->BASIC	Takes a series of Pilot commands and converts them to BASIC.
A	EDITOR	Facilitates the use of commands in Edit.
T	PILOT.INTRODUCTION	Explains function of EDITOR.
A	INTRODUCTION	"
A	MINI-PILOT	Abbreviated version of Pilot. Previous knowledge of language required.
A	MORE-TMA	Explains Pilot commands.
A	INTRO-TMA	Explains variables and match command.
A	MORE-TMA-2	"
A	OTHER INSTR2	Introduces two new commands.
A	EDIT DESCRIBE	Instructions for writing, editing, and saving programs.
A	GRAPHICS/SOUND	Instructions for drawing, saving, and loading pictures.

DISK NO 064		BEST OF EDUCATION
I	ADDITION	Simple addition drill.
A	CONVERSN	Does 19 metric conversions.
A	DATES & EVENT	Matching test on historical events.
A	DATES.IN.HISTORY	Quiz on U.S. history dates, match the list of dates to the list of events.
I	E/LONG DIVISION	Demonstrates long division.
A	FRACTION.MULTIPLIER	Multiplies given fractions.
A	FRACTION.PRACTICE	Basic fraction drill.

A	LEARNIT	Aids memorization of any speech, poem, etc..
I	MULTIPLICATION BD	Basic multiplication drill.
I	MUSIC WARS	Teaches musical notes.
A	NAME STATES	Name all 50 states.
A	REMEMBER.LETTERS	Memory building drill.
A	SAT.TEST	Synonym drill for SAT test.
A	SPEED.READING	Quickly flashes sentences on the screen to type.
A	SPELLING TEST	Spelling drill.
I	STATE CAPITALS	Name the capital of a given state.
I	SUBTRACTION BD	Basic subtraction drill.
A	TYPING	Simple typing drill.
A	VOCABULARY QUIZ	Tests knowledge of useful vocabulary words.

DISK NO 065		EDUCATION
I	CALCULATOR START	Talking calculator that states each number as it is typed.
I	E/MUSICAL MATH TEACHER	Basic math drill.
I	E/LONG DIVISION	Demonstrates long division.
I	COLOR MATH	Practice basic addition of single digit numbers.
I	LONG DIVISION	Shows long division format with remainders.
I	DIVISION	Prints quotient of 2 numbers to desired number of places.
I	MULTIPLY	Gives answer to multiplication problem or raises number to any power.
I	MATH PRACTICE	Practice any math operation.
I	FLASH CARD	Simple math drill with flash cards, (lo res).
I	E/PRESCHOOL LETTER RECOGNITION	Type the same letter the computer displays on the screen.
I	E/SECRET MESSAGE	Tests spelling and addition.
I	E/HOP-HOPPING	Quizzes on addition of "ing" to verbs.
B	IBD	Loads Integer BASIC program.
I	ADDITION	Simple addition drill.
I	SUBTRACTION BD	Simple subtraction drill.
I	MULTIPLICATION BD	Basic multiplication drill.
I	E/SHAPES	Displays shapes on screen to be drawn on paper.
A	RIGHT/LEFT	Divides screen, indicates right/left side key.
A	STOP/GO	Teaches the words "stop" and "go".

DISK NO 066		EDUCATION
I	ALPHABET & SOUND	Musical alphabet and game for preschoolers.
A	CLASS BOY GIRL RATIO	Calculates percentage of boys and girls.
A	CLASS GRADE BOOK	Update, edit, calculate, and display scores.
A	CLASS GRADER	Class grading program. A file needs to be created.
A	CLASS GRADER INITIALIZE	Initializes a file to be used by other class grader files.
A	FINAL GRADE	Calculate final grade for each student.
A	FINAL GRADE DOC	Message for FINAL GRADE.
A	FOURTH GRADE DEMO	Addition, multiplication, fractions, alphabetizing, and name printing.
I	LETTER DISCRIMINATION	Recognize single letters or 2, 3-letter words.
I	SPELL ING	Learn to spell "ing" forms of words correctly.
A	STUDENT GRADE AVERAGE	Allows averaging of student's grades.
A	STUDENT HEAD COUNT	Prints student count according to race and sex.
A	STUDENT HEAD COUNT DOC	Prints data statement showing names, period, race, and sex.
I	TEST IN WOODWORKING	Multiple-choice woodworking test.
A	TEST MAKER	Select and print test from 95 questions.
A	TEST MAKER MULTI CHOICE	"
I	TYPING PRACTICE	Practice single letter, 2, 3-letter words or words of random length.
A	ANSWER SHEET	Prints multiple choice test answer sheet.
A	BELL SCHEDULE	Print own bell schedule using lunch and snack breaks.
A	CHEM GRADER	Part of FILE START C-G, keeps track of student's chemistry grades.
A	FILE START C-G	Start file on any of your classes.
A	READING DRILL	Word recognition drill. Vary speed, use own words or the ones in the program.
A	TEST APPEND	Append test as question/answer or simple text.
A	TEST APPEND I	"
A	TEST TAKER	Gives test written by TEST MAKER.

DISK NO 067		EDUCATION
A	SINEWAVE DEMO	Draws hi res sine wave.
I	E/GUESS MY WORD	Identification game similar to Mastermind.
I	E/PHOTO CAI	Discusses the use of color filters in photography.
I	E/PHOTO QUIZ	"

I	E/MORSE CODE INSTRUCTOR	Computer produces sounds of Morse code for any character.
A	BLIND SPEED	Typing aid, type without seeing words on the screen until finished.
A	TYPING	Simple typing drill.
A	REVELATION	Lesson on 11 chapters of the Bible.
I	MUSIC WARS	Teaches musical notes.
A	LEARNIT	Aids memorization of any speech, poem, etc..
A	FAST.FORWARD.MUSIC	Music sound quiz.
A	SPEED.READING	Quickly flashes sentences on screen to type.
A	REMEMBER.LETTERS	Memory building drill.
A	ESTIMATION	Tests ability to multiply large numbers.
A	SORT.ROUTINE	Sorts numbers or words.
A	BUBBLE.SORT	Bubble sort demo, sorts colors.

DISK NO 068		EDUCATION
A	ARITHMETIC	Functions drills: add, subtract, multiply, and divide.
A	BASIC MATH	Drills on basic math functions.
I	COLOR MATH	Simple problems for children, rewards correct answers with happy face.
A	DATES & EVENTS	Matching test on historical events.
A	E/LONG DIVISION	Demonstrates long division sequentially.
A	FRACTIONS	Teaches fractions with graphic illustrations.
A	GRADING TABLE	Simplify your grading with standard curve or your own curve.
A	HISTORY QUIZ	Multiple choice quiz on the Middle Ages.
B	I	Enables those without Integer BASIC to run Integer programs, type "BRUN I" to get "I" prompt.
A	KITCHEN-AID METRICS	Metric conversion for kitchen items.
A	MATH DRILL	Simple drills: add, subtract, multiply, and divide.
A	SIZE TUTORIAL	Tests your ability to judge relative sizes, (graphics).
A	SPELLING TEST	Flashes your own list of words to type.
A	STORY BOOK PROBLEMS	Simple math problems in text form.
A	SYNONYM DRILL	Prepare for synonyms test for SAT/PSAT.
A	TAXMAN	Outscore the computer by selecting the right combination of factors in a list of whole numbers.
A	TIC TAC TOE	Uses addition, subtraction and multiplication, (2 players).

A	TIMED MATH	Play against the clock, addition and subtraction problems.
A	TYPING PRACTICE	Type various combinations of letters, numbers and punctuation from 7 skill levels.
A	VOCABULARY QUIZ	Tests knowledge of useful vocabulary words.
A	ZAP MATH	A multiplication game, (2 players).

DISK NO 069		EDUCATION
A	TYPING	Typing tutorial.
A	HANGMAN	Basic Hangman game, (lo res).
A	ADVANCED GUESS MY FRACTION	Guess the number the computer generates.
A	CHRISTMAS CARD	Shows picture and plays Christmas carol.
A	CRAYFISH EX. ANATOMY	Crayfish anatomy drill.
A	FRACTIONS TO DECIMALS	Quiz on changing fractions to decimals.
A	GEOGRAPHY	Guessing game using geographic names.
A	MULTIPLICATION BINGO	Bingo using multiplication tables.
A	SEQUENCES	Generates sequence with any 2 numbers.
A	THE FUNCTION GAME	Teaches the use of the function keys in a game.
A	BASEGUSE	Guess a number in any base.
A	MUGWUMP	Find the mugwump in the grid.
A	ADDFRAC DEC	Adds 2 inputted fractions.
A	CONVERSN	Does metric conversions.
A	CHOMP	Matrix game, object is to avoid the poison square.
A	DECODER #1	Decodes entered message.
A	ENCODER #1	Codes entered message.
A	NAME STATES	Name all 50 states.
A	STATES	Guess the state capitals.
B	CRAYFISH.PIC.PACKED	Picture of crayfish for CRAYFISH EX. ANATOMY.

DISK NO 070		EDUCATION
A	CIVIL	Civil War game.
A	FURS	Simulates French fur trading expedition, (game).
A	NOMAD	Object is to get to Grandma's, (game).
A	NOMAD2	"
A	SUMER	Simulates the government of Sumer, (game).
A	VOYAGER	Object is to reach a rainy lake, (game).

A	VOYAGE	"
A	VOYP2	"
A	SELLP	Sell tomato plants in limited amount of time.
A	SELLL	Sell lemonade for profit.
A	SELLA	Sell apples.
A	SELLB	Manage a bike company.
A	STRINGS	Simulates an African string custom, (graphics).
A	STRWINST	Instructions for STRINGS.

DISK NO 071		EDUCATION
A	GRADE CURVER	Generates a grading curve.
A	GRADE	Allows teacher to make a grading system.
A	GRADE.CURVER	Generates a grading curve.
A	MATCHMAKER	Sets up a matching test.
A	SAT.TEST	Synonym drill for SAT test.
A	VOCAB	Vocabulary drill.
A	GERMAN	German vocabulary drill.
A	FLASH.CARDS	A French to English flash card game, (needs work).
B	FRENCH.GEN	Part of FLASH.CARDS.
B	LOMEN:	"
A	ROOTS.&.PREFIXES	Extensive quiz on definitions of roots and prefixes. Includes 8 text files.
A	HISTORY.QUIZ	Pick a famous person, computer guesses that person.
A	MIDDLE.AGES.QUIZ	Multiple choice quiz on Middle Ages history.
A	DATES.IN.HISTORY	Quiz on U.S. history dates, match the list of dates to the list of events.

DISK NO 072		EDUCATION
A	MATH DRILL	Elementary subtraction drills.
A	MATH DRILL 2	Math quiz.
A	MY SPELLING TEST	Saves word lists.
A	FRACTION.MULTIPLIER	Addition of fractions.
A	FRACTION.PRACTICE	Basic fraction drill.
A	BALLOONS	Fraction drill, pops a balloon when guess is correct.
A	SPELLING TEST	Spelling drill.
A	TOM'S MATH DRILL	Timed test on addition and subtraction.

A	ARITHMETIC TAC DOUGH	Similar to tic-tac-toe, answer a math question correctly to score an "X" or "O".
A	ADDING FRACTIONS	Fraction and addition drill.
A	GUESSING FRACTIONAL AREA	Drill on judging sizes.
A	TAXMAN	Game that involves factors of a number list.
A	ZAP	Math multiplication game.
A	FUNCTIONS #1	Graphs different functions.
A	FUNCTIONS #2	"
A	BEARING AND DISTANCE	Determine distance with latitude and longitude.
A	MATH	Basic math operations drill.
A	WORD.PROBLEMS	Elementary word problems.
A	COLOR MATH	Basic math drill.
A	METRICS AREA	Converts English to metric units for area, length, volume, kitchen measurements, temperature, and weight. Five separate files.

DISK NO 073		EDUCATION-MATH
A	MATH TUTOR	Simple math tutor program, (graphics).
I	MUSICAL MATH TEACHER	Rewards right answers with a short tune.
I	SUPERMATH	Math game using large colored numbers, (graphics).
A	CATCH THE FISH	Clever drill on units on a number line.
I	COLORMATH	Math game using large colored numbers.
B	H.W/LTM	Utilities used by SUPERMATH, (graphics).
I	DARTS	Estimate fractions on a number line, (game).
A	SCHOOLHOUSE MATH	Practice on all operations, (graphics).
A	WORD PROBLEMS	Simple addition using word problems.
A	ZAP	Two player dice drill in multiplication.
A	LAMARODA	Simple multiplication drill, results shown in Spanish.
A	ARITHMETIC TAC DOUGH	Very adaptable math competition, (2 players).
I	ADD WITH CARRY	Drill that takes student through steps of carry add.
A	ADDING FRACTIONS	Drill on adding fractions, (graphics).
A	TAXMAN	Math game using concept/factors numbers, (graphics).
A	CALCULATOR	Program that functions as a calculator.
A	MATH DICE	Use math skill to get highest score.
A	TAKE IT APART	Two team math game using addition and multiplication.
A	ZERO	Drill with large digit numbers.

A	ROUND	Practice on rounding off numbers.
A	RIGHT TRIANGLE	Computes unknown side/angle, given other sides.
A	GUESSING FRACTIONAL AREA	Drill on fractional areas, (graphics).
A	COIN TOSS	Tabulates probability of coin tosses.
I	HURKLE	Look for a Hurkle on a grid.
A	SIMILAR	Short animated tutorial on similar triangles.

Electronics and Radio

This category of disks contains programs tailored to special breeds of hobbyists. The ham radio operator can use programs to create a log or contact others. The students of Morse Code can use the programs to learn and practice their skills. Still other programs are included for the amateur electronics designer.

DISK NO 074		ELECTRONICS AND RADIO
T	MORSE CODE DATA	Text file that stores MORSE CODE DATA.
I	MORSE CODE DRILL	Encode words into Morse code speaker.
T	MORSE CODE EXEC	Runs MORSE CODE WRITER.
I	MORSE CODE EXEC WRITER	Uses MORSE CODE READER and MORSE CODE WRITER.
I	MORSE CODE FLASH	Sounds and flashes letters.
A	MORSE CODE INTERPRETER	Sounds out code.
I	MORSE CODE PRACTICE	Practice Morse code.
I	MORSE CODE READER	Sounds out random characters in groups.
I	MORSE CODE RECEIVE	Sounds out user-supplied or random letters.
I	MORSE CODE SEND ALPHAMERIC	Sounds out any character typed in.
I	MORSE CODE SEND CHARACTERS	Sounds out words.
I	MORSE CODE SEND MESSAGE	Sounds out typed message.
A	MORSE CODE SENDER	Sounds out code while being typed.
I	MORSE CODE TEACHER	Sounds out each letter.
I	MORSE CODE TRAINER	Teaches Morse code.
I	MORSE CODE TRUSTY	Morse code quiz.
A	MORSE CODE TUTORIAL	Sounds out messages.
I	MORSE CODE WRITER	Writes Morse code into a text file.
A	BEGINNING MORSE CODE	Beginner's instructions for Morse code.

DISK NO 076		ELECTRONICS AND RADIO
A	DXCC DEMATTIA	Stores data for 5-band DXCC, indicates the location of data for revision.
A	DXCC GAME WITH PRINTER	Tests your ability to identify DXCC code.
A	DXCC WAGNER	Searches for a listing by inputting a call's prefix, country, or continent.
A	ELCT CALCULATOR I	Seven different functions that calculate problems for elections.
A	FILTER NOTCH	Makes calculations for construction of a notch filter.
A	LIGHTING LIFE CYCLE	Analysis of the economic life of a lamp.
A	LOG AMATEUR RADIO	Log that stores radio information by date, call sign, mode, and band.
A	MAP PROJECTIONS	Asks for longitude and perspective in terms of radians, then inscribes the product.
A	REACTANCE CALCULATIONS	Solves problems for inductance, capacitance, and inductive reactance.
A	RESISTOR COLOR CODE DECODER	Mixes colors then gives the tolerance and number of resistance.
A	RESISTOR COLOR CODE QUIZ	Learn resistor color codes.
A	TOWER GUY WIRE LENGTHS	Gives length of cable needed, input information about height, distance, and number of sets of 3 guy wires.
A	TRANSISTOR PARAMETERS	Calculates transistor parameters needed for given information.
A	WAS RECORDS	Same as DXCC DEMATTIA, but stores information on states in the U.S.
A	WAZ RECORDS	Same as WAZ RECORDS, but stores information on zone.

DISK NO 077		ELECTRONICS AND RADIO
A	ADDRESS BOOK	Add, review, delete, change; find by phone number, first name, address, city, and state.
A	DUPE CONTEST	Ham radio log and address book.
A	DUPE FINDER	List names only, in alphabetical order.
A	DUPE SHEET	Creates and saves dupe sheet.
B	DUPE SHEET	Changes writing style into calligraphy look.
A	HAM CLUBS	Lake County Amateur Radio Association membership tracker.
A	HAM LOG 10X	Amateur radio log.

A	HAM LOG MASSIMO	Japanese ham operators list: names, numbers, etc..
A	HAM LOG ZAPPALA I	Tells date, call sign, band, mode, and name of operator on lists.
A	HAM LOG ZAPPALA II	"
A	LOADED DIPOLE DESIGN	Tells coil design and induction.
A	LOG BOOK 1.1	A logkeeper for amateur radio operators.
A	LOG BOOK 1.1 INSTR	Instructions on how to work the LOG BOOK 1.1.
T	LOG BOOK COMMENTS	"
A	LOG BOOK NEW START	"
A	LOG NET CONTROL	Similar to above program, with scratch pad.
A	PHONE DIRECTORY	Makes a ham radio directory.
B	RTTY INTERFACE.PIC	Picture of an opto-insulator.
A	RTTY.PICTURE LOADER	Loads a picture.
I	HAM LOG STATION	Prints log sheet for ham radio station.
I	QSL FILE	Search for frequencies.
B	DUPE SHEET.Y	Changes writing style into calligraphy typewriting.

DISK NO 078		**ELECTRONICS AND RADIO**
A	ANTENNA LENGTH	Gives length of wire needed for resonant frequency.
A	ANTENNA HEIGHT	"
A	ANTENNA PLOT	Pattern plotter for point source antenna arrays.
A	CONDUIT FILL	Computes standard conduit trade sizes.
A	ELCT CALCULATOR II	Does numerous math calculations using electronic formulas.
A	ELCT FORMULAS	Resolves electronic problems.
A	ELCT ZBARS	Basic electronic tests.
A	ELECTRIC RATE PLAN	Calculates costs of different rate plans.
A	ELECTRICITY CONSERVATION	Calculates cost per item per month of electrical utilities used in the home.
A	NOISE BRIDGE CALCULATOR	Finds real and imaginary parts of antenna impedance.
A	OHMS LAW	Calculates formula from variables given.
A	OHMS LAW FORMULA	"
A	QSL CARD	Amateur radio log and inquiry system.

A	QUAD ANTENNA DESIGN I	Allows designing of your own high gain antenna.
A	QUAD ANTENNA DESIGN II	Expanded version of QUAD ANTENNA DESIGN I.
A	TRANSISTOR AMP CALCULATOR	Basic program for transistor amplifier calculation.

DISK NO 079		ELECTRONICS AND RADIO
I	HAM LOG STATION	Build ham log book for a station.
I	INPUT AMPLIFIER	Study audio and speech data.
I	LOGIC ANALYZER	Helps in building electronic circuit designs.
I	LOGIC CIRCUIT ANALYSIS	Analysis of an electronic design made.
I	QSL FILE	File for QSL cards received.

Food and Nutrition

"You are what you eat." The programs on this disk illustrate how food can affect your health, weight, and pocketbook. Many of the programs perform calculations to determine such things as calorie needs, correct weight, and English to metric conversions. Other programs assist in food preparation and recipe filing. The programs are of interest to the cook, the dieter, or anyone who is concerned with nutrition and health.

DISK NO 092		FOOD AND NUTRITION
A	CALORIE COUNTING PROGRAM	Figures calorie value of food per serving, prints. Has limited memory bank, but can add new foods to list.
A	CALORIE RQMTS	Computes calories per day for your height, age, and activity. Also figures your correct weight.
A	FOOD VALUES	Gives percentage values of U.S. daily allowance for calories, protein, and vitamins and 62 foods, (color graph).
A	IDEAL BODY WEIGHT	Gives ideal body weight and percentage of body fat, body surface area, and total body water, (limited to certain heights).
A	LIFE EXPECTANCY	Figures your life expectancy using factors such as heredity, health, and diet.
I	LIFE EXPECTANCY TEST	Simple, multiple choice type test.
A	METRIC CONVERSION	Does English to metric conversions, and vice versa.
A	METRIC KITCHEN	Converts from English to metric for dry and liquid measurements, distance, and temperature.
A	RECIPE BOX	Retrieves, adds, reorganizes, prints, deletes, and displays recipes.
T	INDEXRECIPE FILE	"
T	RECIPE FILE	"
A	RECIPE CALORIE COST	Increases recipe to make more servings, figures calories in a recipe, and cost of a single recipe.
A	RECIPE COST	Same as recipe cost program in above file.

Games

A wide variety of interests are represented on the game disks, which include educational, sports, casino, board, and adventure games. An adventure game is an interactive story which allows the user to make choices to determine the fate of the main character. Games are written in text unless the description is followed by the words hi res, lo res, or graphics.

DISK NO 099		BEST OF GAMES
I	BOWLING 2	Game of hi res bowling, (1 or 2 players).
B	DAYTON DINGER	Fantastic game of hi res pinball created using "Pinball Construction Set" by Bill Budge, (requires joystick or paddles).
A	ARENA OF OCTOS	Hi res arena combat game.
A	AWACS	Strategic deployment and control of a squadron of fighter planes, (hi res).
B	SHARK BAIT	Fast, hi res arcade type action game. Avoid being sunk by rain in a boat and shoot fish at the same time in order to survive. Created using "The Arcade Machine" by Broderbund Software.
A	HORSE RACE III	Version of traditional horse race betting game, (hi res).
B	CHESS 2	Excellent hi res game of 1 player chess with adjustable difficulty levels for the beginner to expert.
A	RADAR DEFENSE	Attempt to stop the incoming missiles, (hi res).
B	BREAKOUT 3	Very fast version of classic arcade game. Responsive controls and good hi res graphics.

DISK NO 100		GAMES
A	BLACKJACK STRATEGY	Tutor for the game of blackjack.
A	CARD GAME	Computer deals 2 cards face up and a third face down. Bet whether the the value of the third card will fall between the first two.
A	CARRYING-BALLOON	Guide a man hanging from a balloon through a maze of trees to a safe landing; joystick needed.
A	COMBAT	Simple war simulation game.
A	CRAPS BW	A Crap game.

A	CRIBBAGE I BW	Traditional game of Cribbage.
A	FOOTBALL PREDICTIONS	Predicts football winners, (needs tape).
A	FOX AND HOUNDS	Hounds must catch the fox.
A	FRENCH MILITARY GAME	Heuristic cornering game, (lo res).
A	GOLD MINE	Mine the million dollar gold mine.
A	GOLF II	Game of golf.
A	HI Q	Traditional peg game.
A	HOCKEY I	Hockey game with many options.
A	HORSE RACE III	Place a bet on the horses, (hi res).
A	KINGDOM	Attempt to rule the country.
A	LITERATURE QUIZ	Nursery tale quiz.
A	MAROONED IN SPACE	Identify the planet you are orbiting.
A	PING PONG	Pong game, (lo res).
A	ROBOT BW	Avoid the robots.
A	SURVIVE	Survive the space war.
A	TWONKY I	Escape a maze before the monster gets you.
A	WORD MAZE MAKER	Word search puzzle maker, prints.

DISK NO 101		GAMES
I	BOWLING 2	Good version of game of bowling, (hi res).
I	CHESS MINI	Game of chess, (text).
I	CONNECTION	Try to connect four checkers in a row while preventing your opponent from doing the same.
I	GAME PAK 2	Four games including Sink The Ship, Marble Drop, Shooting Stars, and Mouse, (graphics).
I	GAME PAK 3	Four games, including Star Wars, Hex a Pawn, Awari, and Tower of Hanoi, (graphics).
I	HAMMURABI	Successfully govern ancient Sumeria for 10 years.
A	INVADERS	Blast alien invaders before they blast you, (requires paddle).
I	KENO 2	Number choosing game, similar to Bingo, (graphics).
A	MARS MAZE	In the year 2018 your mission is to rescue the kidnapped princess held captive in the underground caverns of Mars.
A	MASTERMIND	Colored peg game.
I	MAZE GENERATOR	Maze generator, (text).
I	MAZE RACE TIMED	Time limit to get through the maze, (graphics).
I	PARACHUTE	Parachute jump game, (graphics).

I	SIMON SAYS	Type the musical notes in the same sequence as Simon, (graphics).
I	TREK APPLE 2	Detailed text game of Star Trek, seek out and destroy the Klingons.
I	WUMPUS HUNT	Hunt a group of Wumpus in caves.

DISK NO 102		GAMES
I	APPLE HORSE (C)	Basketball game called "H.O.R.S.E.", (2 players).
A	ASTEROYDER	Hi res arcade game. Destroy the aliens.
A	BIKE JUMP BW	Attempt longer jumps on a motorcycle.
A	CHECKERS I	Graphic game of checkers.
A	COIN TOSS	Coin tossing game.
A	CRAPS II	Crap game, (graphics).
A	FATHOM	Hit the submarine with depth charges.
A	FIZZ BIN	Card game.
A	FOOTBALL BW	Text game of football.
A	GOLF III	Detailed game of golf, (graphics).
A	MASTERMIND	Guess 5 colors in the correct sequence in a minimum number of guesses.
A	NAME THAT DATE	Historical date quiz.
A	SHOOTING ALIEN	Shoot all the aliens. Graphic arcade game.
A	SPACE CHASE	In the year 2080 a massive space war has reduced civilization to rubble. You and 150 others are the only survivors on Earth. Your mission is to command the spaceship Voyager and find a new planet to colonize, but the enemy still exists, (text).
A	SPACE MAZE	Fly a space fighter through a ringed maze, (requires joystick).

DISK NO 103		GAMES
I	BATTLESTAR	Spacebattle, (graphics).
A	BOGGLE II	Gives rules and random letters to form words in limited amount of time. Similar to Scrabble.
I	CHESS 2	Excellent game of chess, (hi res).
I	CONCENTRATION	Card matching game, (graphics).
I	DRAGON MAZE 3	Maze creator, (graphics).
A	EAMON CHAR BUILDER	Cheat with Eamon game. Create characters and give them weapons.
A	ECONOMIC SIMULATION	Make money as a union manager, (1-4 players).

I	FIRE	Firefighting game, (graphics).
A	FOOTBALL APPLE	Football game that works like the hand held games, (lo res).
I	GOLF SCORE & HANDICAP	Saves and prints golf scores and calculates handicaps.
I	PINBALL SUPER	Pinball game, (graphics).
I	POKER STUD	Five card poker, (hi res).
I	SIMON	Plays notes in same sequence as computer.
I	SOLITAIRE CHECKERS BW	Puzzle using checkers rules and checkerboard.
I	STORY TELLER	Enter words that computer enters into a story.
I	TAX MAN	Beat the taxman at a numbers game.
I	TIME BOMB	Defuse a bomb in 5 seconds.
I	WUMPUS 2	Find and kill the Wumpus before he attacks.

DISK NO 104		**GAMES**
A	ANAGRAM +	Word game. Decipher the anagram in 3 guesses.
A	BASKETBALL	Basketball game.
A	BOGGLE I	Computer aid to game of Boggle.
A	CARRIBEAN CRUISING	Sailboating game, (graphics).
A	CRIBBAGE II BW	Traditional game of cribbage.
A	DRAGON MAZE ERASE I	Graphic maze creator.
A	DRAGON MAZE ERASE II	"
A	FORT II	Defend a western fort from an Indian attack.
I	GAME PAK 1	Five games, including Breakout, Dragon Maze, and Klingon Capture.
A	GEOGRAPHY I	Quiz on knowledge of geography.
A	HORSE RACE I	Horse race game, (graphics).
A	LASER SEARCH	Version of Black Box, 1-9 hidden objects, fire lasers beams to find the objects.
A	MONOPOLY II	Text version of traditional game of monopoly.
I	ROCKET PILOT INSTR	Pilot a rocket over the mountains, (with instructions, hi res).
A	ROULETTE	Place your bet and watch the ball fly, (lo res).
A	TWONKY III	Avoid the monster while going through a maze.

DISK NO 105		GAMES
I	BACKGAMMON	One player backgammon game.
I	CAPITALS OF STATES BW	Test on state capitals.
I	CASINO ROYALE	Graphic version of the classic card game.
I	DARTS	Text game of darts, (1 to 16 players).
I	FOOTBALL	Graphic game of football.
I	FOOTBALL NFL	Football game, choose plays, (graphics).
I	GIN RUMMY	Excellent hi res version of Gin Rummy.
I	HAUNTED MANSION	Adventure game, explore a haunted mansion.
I	HI LO	Try to guess the number, computer gives hints.
I	ROLL EM	Graphic dice rolling game.
I	SAUCER INVASION	Hi res arcade game.
I	SIMON SAYS SUPER	Match the notes and/or colors in the same sequence as the computer, (graphics).
A	TASK FORCE.1	Use ship's sonar to find and depth charge the submarine, (hi res).
I	WALL BUILDER	Trap your opponent before he traps you.
I	YAHTZEE	Version of Yahtzee, (graphics).

DISK NO 106		GAMES
A	ANIMAL	Computer tries to guess animal you think of.
A	ART AUCTION	Buy and sell paintings, (graphics).
A	BALL CATCHER	Try to throw the ball to the top, (graphics).
A	BOMBARDMENT	Hit opponent's outposts before he hits yours.
A	BOXED IN	Box in the center square before the time runs out, (graphics).
A	DEPTH CHARGE	Destroy the submarine in 3 shots or lose.
A	DOGFIGHT	Airplane dogfight, (hi res).
A	DOORS	Open doors in a limited number of tries.
A	ELEVATE	Sink an enemy ship.
A	FORT I	Hold the fort from the Heckanee Indians for 3 days.
A	GOLF I	Game of Golf.
I	GOLF PAR	Golf game, choose clubs, (graphics).
I	KILL A LINE	Score 1000 points by shooting planes.
A	KLINGON CAPTURE	Capture a spaceship without destroying it.
A	MONSTER CHASE	Avoid the monster, (graphics).
A	NUMBER GUESS	Guess the number the computer is thinking of.

A	OBSTACLE	Navigate an obstacle course.
A	PETALS ROUND THE ROSE	Dice puzzle.
A	ROLL DICE	Dice rolling program.
A	STAR TREK SUPER	Destroy the Klingons in limited amount of time.
A	STOCK MARKET GAME	Gamble away a fortune on the stock exchange.
A	WORD PUZZLE	Word search puzzle generator, prints.

DISK NO 107		GAMES
A	ATOM 20	Adventure game, find survivors of a nuclear war.
A	BOXER	Boxing game, choose number of rounds and name of boxer.
A	INSPECTOR CLEWSO	Murder mystery, be the detective.
A	KENO	Match as many numbers as possible out of 20 random numbers.
A	KING	Run a country and keep the people alive.
A	OIL	Run an oil company and try to make a profit.
A	OTHELLO WITH DOC	Othello game, choose "X" or "O", and skill level.
I	PING PONG OR HANDBALL 1	One player pong or handball game.
I	REVERSE NUMBERS	Reverse numbers and get them in order.
I	ROBOT CHASE	Destroy all robots before they attack.
I	SALVO	Battle ship game.
A	SPLAT	Simulates a parachute jump.
A	STAR LANES	Make money by trading with interstellar ships.
A	STAR LANES INSTR	Instructions for STAR LANES.
A	TWONKY II	Find way safely out of a maze.

DISK NO 108		GAMES
A	ARTILLERY I	Shoot the enemy over the hill, (hi res).
A	ARTILLERY II	Shoot down the target with a limited amount of ammunition, (lo res).
A	BOMBING MISSION	Easiest bombing mission in the world.
A	BULLFIGHT	Try to kill the bull.
A	FACTOR GAME	Outscore computer by picking factors of numbers.
A	FIND HURKLE	Find Hurkle in a 10 by 10 grid or on a line, (graphics).
B	FIND HURKLE.OBJ	"
A	FOOTBALL NFL	Football game, 13 offensive and defensive plays, keeps statistics.

A	FOOTBALL	Football game with offensive and defensive plays.
A	FUR TRADER	Make money by trading fur.
A	HANGMAN I	Hangman game with graphics for each miss.
A	HANGMATH	Hangman with multiplication of numbers.
A	HOCKY II	Simulates a hockey game, (2 players).
A	MONOPOLY I	Monopoly game, (2 players).
A	OREGON	Simulates Oregon Trail, survive the 2040 miles.
A	PIZZA	Memory game, remember a map when it asks a question.
A	SAIL PLANE LANDER	Simulates a sail plane on its approach.
I	SPACE LANDING	Land spacecraft safely, (lunar landers).
A	SWORDS AND SORCERY I	Dungeons and Dragons type program.
A	SWORDS AND SORCERY II	Same as above, with "Y" or "N" instead of numerical answers.
I	WORDS BOUNCING	Bounces words around screen.

DISK NO 109		GAMES
I	ADVENTURE 2	Adventure, collect treasure and put it in a tower.
I	BLACK BOX	Find the atoms by shooting rays into 8 by 8 matrix.
I	BREAKOUT 2	Breakout game, select paddle size, (graphics).
A	CAPITALS OF NATIONS	Easier version of capitals of countries.
I	CAPITALS OF STATES	Gives state, guess capital. Also draws a flag.
A	CAPITALS OF STATES I	Capitals of the states game.
A	CAPITALS OF STATES II	Capitals of states game, fill in or multiple choice.
A	CAPITALS OF STATES III	Better version of STATES OF CAPITALS II.
A	CAPITALS OF STATES IV	Friendly version of STATES OF CAPITALS III.
A	CAPITALS OF STATES V	Another version of STATES OF CAPITALS that uses map of US divided into 4 regions.
A	CHASE	Move a block and try to avoid being caught, (graphics).
I	CIVIL WAR QUIZ	Quiz on the Civil War.
I	CONNECTION PDLS	Make boxes by connecting the dots.
I	GAME PAK 5	Addition quiz with secret message.
I	HISTORY QUIZ	Quiz on American History.

I	HORSE APPLE DOWNS	Game, bet on horses.
I	KWAK STAK	Memory game, remember either duck or egg, (graphics).
I	OFF THE WALLS	Bounce a ball off the walls of a box.
I	TREASURE	Wander around in search of treasure, (graphics).

DISK NO 110		GAMES
I	ACEY DEUCY FOR TWO	Acey Deucy, try to draw a card between two other cards, (graphics).
I	AIR SIMULATOR	Aircraft game which uses joystick, (hi res).
I	CAPITALS OF COUNTRIES	Capitals of countries game.
I	CODE BREAKER	Mastermind game with letters A-H.
I	CRAZY EIGHTS	Crazy Eights game against the computer, (hi res).
I	GAMMON 1	Simulated Backgammon game, (hi res).
I	GAMMON 2	Improved version of GAMMON 1, (hi res).
I	GUESS A NUMBER	Try to guess the computer's number.
A	HORSE RACE II	Bet on horses, pick the winner.
A	LUNAR LANDING	Land a ship in the landing zone by controlling the thrust, (lo res).
I	MEMORY MADNESS	Match the blocks game, (lo res).
I	PINBALL SLOW	Pinball game with bombers and sound, (hi res).
I	PING PONG	Ping Pong game with moving balls, (lo res).
I	PING PONG 2 PLAYER 2	Ping Pong game with 2 goals for each, (lo res).
I	PING PONG OR HANDBALL 2	Handball with a small goal, or Ping Pong with a big goal, (lo res).
I	ROCK PAPER SCISSOR	Old game of rock, paper, scissors.
A	ROCKET	Another version of LUNAR LANDING.
A	ROULETTE BW	Pick the number and test your luck.
I	SELL PLANTS OR LEMONADE	Game, try to sell plants or lemonade.
I	SIMON SAYS WOW	Simon Says game.
I	SPEED RACER	Racing game that uses 2 paddles, (lo res).
A	TARGET	Shoot a target in a 3-dimensional area.
I	TENNIS	Pong game, 2 goals and a computer opponent.
I	TIC TAC TOE	Basic tic-tac-toe game, (lo res).
I	TIC TAC TOE BW	Similar game with different numbers.
I	TIC TAC TOE PDL 0	Another tic-tac-toe game with paddles, (lo res).
A	TREASURE HUNT	Find the treasure in a maze of caves.

DISK NO 111		GAMES
I	AIRPORT	Guide plane into runway using the keyboard, (graphics).
I	BATTLESHIP	Battleship game.
I	BLACKOUT	Remove all numbers on board with dice rolls.
I	BOMBS AWAY	Drop bombs at moving targets.
I	BREAKOUT 1	Breakout game, choose colors, (2 players).
I	BRICKOUT 2 PLAYERS	"
I	BRICKOUT 3 SPEED	Breakout, choose paddle size.
I	CASINO	Play against a one-armed bandit.
I	CHASE REAL TIME	Make the robots destroy themselves before they attack, (lo res).
I	CRIBBAGE	Cribbage game, (hi res).
I	DODGEBALL	Avoid bouncing balls for points, (2 players).
I	DON'T FENCE ME IN	Light cycles with sound.
I	DRAGON MAZE 1	Computer makes maze and tries to find way out.
I	DRAGON MAZE 2	Computer makes maze, try to get out.
I	DRAGON MAZE REAL TIME	Generates visible maze, dragon can jump walls.
I	HAMMURABI HURKLE MULTIPLY	Three games, budget for survival.
I	HIDDEN MOUSE 1	Find hidden mouse in a 10 by 10 grid.
I	LUNAR LANDER	Land on the moon using paddles, (hi res).
I	MIDWAY	Sink ship from plane.
I	PING PONG 2 PLAYER 1	Pong game, (2 players).
I	RUN A ROUND	Light cycle game with keyboard, (2 players).
I	SEA WAR 1	Air-sea battle, (1 or 2 players).
I	SEA WAR 2	Same as above with steerable bullets.
I	SLOT MACHINE $2	Slot machine with $2 bet.
I	SLOT MACHINE BW	Slot machine, bet from $1 to $100.
I	SLOT MACHINE DICE	Slot machine with dice, bet from $1 to $100.
I	TANKS	Combat between 2 players in tanks, (paddles).
I	SEA HUNT	Depth charge the submarine.

DISK NO 112		GAMES
I	BAGELS 3	Mastermind type game.
I	BLACKJACK	Game of Blackjack, (graphics).
I	BLACKJACK BW	Game of Blackjack.
I	BLACKJACK TUTOR	Teaches Blackjack.
I	CHECKERS 2	Checkers, (graphics).

I	CHESS 1	Chess, (requires a joystick, graphics).
I	CLOSE THE SQUARE	Fill in squares, (2 players, graphics).
I	CRAPPS	Simulates a craps game, (graphics).
I	CUBIC 1	Three-dimensional tic-tac-toe game.
I	CUBIC 2.3	Three-dimensional tic-tac-toe game, (hi res).
I	HORSE RACE 2	Simulates a horse race, (graphics).
I	LUNAR LANDER BW	Land a ship with very little fuel before it crashes.
I	OREGON TRAIL 1	Survive the Oregon Trail.
I	POKER DRAW BW	Simulates a poker game with betting.
I	POKER DRAW 2	Draw poker, bet high, but don't hold for an inside straight.
I	ROULETTE	Simulates a Roulette game with 5 types of bets.
I	SOLITAIRE BW	Solitaire game with numbers instead of cards.

DISK NO 113		GAMES
I	ABSTRACT	A game similar to Mastermind.
I	ACEY DEUCY	A card game, choose your own fate.
I	APPLEJACK 21	Blackjack played Apple style.
I	BREAKOUT 3	Break the wall and score.
I	CARD TRICK 2	Pick a card and the computer will guess it.
I	CHEMIST	Guess how much water is needed or die.
I	COLOR RAYS	Hit opponent or be hit, (2 players).
I	CONNECTION REV	Connect any 4 spaces in any row and win.
I	DRIVER	Test your driving skills.
I	GO MO KU	Tic-tac-toe, 5 in a row wins.
I	GUIDED MISSILES	Hit targets by guiding missiles.
I	JUGGLE	Juggle balls and score points.
I	MAZE RACE	Guide a car through a maze.
I	OREGON TRAIL 2	Can you survive the Oregon Trail?
I	SAUCERS AND STARS	Shoot saucers and stars.
I	SHOOT OUT	Shoot your opponent.
I	SHOOTING GALLERY	Hit moving targets and score.
I	SHOOTING STARS 1	Encircle a black hole and win.
I	SHOOTING STARS 2	A difficult version of SHOOTING STARS 1.
I	SHOW DOWN	Choose speed and draw gun.
I	STOCK MARKET	Buy or sell stock.
I	SUB	Kill enemy submarines.
I	SELL APPLES	Find the best price for apples.

I	SHOOTING STARS 4	Shoot the stars to make black holes.
I	SLOT MACHINE COLOR	Play the slots, get rich or go broke.
I	TALKING NUMBER GUESS	Guess the number, computer talks back.
I	THIEF	Find the thief by questioning suspects.

DISK NO 114		GAMES
I	ANTI AIRCRAFT	Shoot planes down with gun, (lo res).
I	APPLE WARS 1	Destroy the Death Star with rebels, and avoid tie fighters, (hi res).
I	APPLE WARS 1.1	"
I	BAGELS 1	Guess a 3 digit number.
I	BULLS AND BEARS	Buy and sell stock.
I	GAME PAK NIGHTMARE	Zot, The Devils Dungeon, Tiger Trouble, and Jive Turkey.
I	GUIDED AIRPLANE	Shoot down robot planes, (lo res).
I	HIDDEN MOUSE 2	Guess where mouse is hidden in a 10 by 10 grid.
I	INTERSTELLAR	Destroy enemy ship and save mankind.
I	KENO 1	Casino game, similar to Bingo.
I	SLOT MACHINE $2 + SOUND	Slot machine game, (lo res).
I	SPACE PILOT	Guide Darth Vader back to the Imperium.
I	SPACE WAR FOR TWO	Each player tries to shoot the others planes.
I	STAR SHIP ATTACK	Destroy invading ship before it attacks, (lo res).
I	STAR TREK MINI	Destroy invading Klingon ships.
I	STAR WARS	Targeting game, (lo res)
I	STAR WARS FOUR	Destroy the Death Star and Tie Fighters.
I	TREK	Destroy Klingons in the Enterprise.
I	WAR LORDS	Gain land with divisions, (2-4 players).

DISK NO 115		GAMES
I	AIR ATTACK	Bomb base with plane, (hi res).
I	ALIVADER	An invasion of Earth, your mission is to destroy the alien, (requires joystick).
I	BAGELS 2	Word guess game.
I	BASEBALL	Match numbers 0-4 to get on base, (text).
I	BINGO	Bingo game, (lo res).
I	BINGO CARD	"

I	BOMBER	Bomb tanks, (hi res).
I	BOXING	Pick boxer's advantage and disadvantage.
I	CARRYING BALLOON	Guide man with balloons past obstacles to reach a goal, (hi res).
I	CRYPTOGRAM	Decode a cryptogram.

DISK NO 116		GAMES
A	BATTLE	Hide your outposts and find the computers before it finds yours.
A	CENTURY 51	Use paddles to shoot enemy ships before they shoot yours.
A	COMMODITY MARKET	Stock market type game.
A	CRYPTOGRAMS	Break the code to decipher a message.
A	FRUSTRATION	Game of logic, the object is to flip the colored tiles, (lo res).
A	GEOGRAPHY II	Geography game.
A	HANGMAN II	Hangman game, (lo res).
A	MARKET CRASH	Make money in the stock market.
A	NAME THE STATES	Remember all 50 states.
A	PUZZLE GENERATOR	Make hidden word puzzles, prints out.
A	SOLITAIRE CHECKER PUZZLE	Logic and luck puzzle, eliminate the checkers.
A	SPELL THE STATES	Guess the state by its initials.
A	SPELUNKER	Cave adventure game.
A	SUBSCAN FOR TWO	Time war simulations, pits a bomber against your submarine.
A	WORLD WAR	Maneuver troops, planes, artillery, tanks, and missiles to take over the world.

DISK NO 140		ADVENTURE GAMES
I	ADVENTURE HELLO	Runs the games.
I	ADVENTURE.PROGRAM	Adventure involving caves, castle, wizard and a dragon.
I	ADVENTURE.EX MAKER	"

DISK NO 141		ADVENTURE GAMES
A	ADVENTURE	Adventure to explore a magic cave.
A	ADVENTURE HELLO	Instructions for the 2 adventures.
A	ADVENTURE START-UP	"
A	STARWARS ADVENTURE	Kill Darth Vader, escape from Death Star.

Hello and Menu

These disks contain various hello programs used to introduce a disk. Pictures and animation are included with several of the hellos and menus.

DISK NO 166		HELLO AND MENU
A	BILLBOARD ROMANO	Scrolling message.
A	BILLBOARD SINEWAVE	Message moves from side to side in sinewave pattern.
A	CATALOG MANAGEMENT	Menu program with filename edit ability.
A	CATALOG MANAGEMENT EDIT	Creates a text file with catalog management.
A	CLOCK CARD HELLO	Initializes a Mountain Hardware clock card when run.
A	CLOCK CARD HELLO I	"
A	CLOCK CARD HELLO II	"
A	CLOCK CARD TIME KEEPER	"
A	HELLO ALLEN I	Program menus with file explanation.
A	HELLO ALLEN II	"
A	HELLO AND ART	Menu with picture.
A	HELLO APPLE DAYTON	Automatic menu.
A	HELLO APPLE LOGO	Disk catalogger with hi res Apple picture.
A	HELLO APPLE PI DOM	Apple Dayton with picture.
A	HELLO APPLE-VENTION	Dayton hello, exit to monitor.
I	HELLO APPLENET	Catalog with animated picture.
A	HELLO AUTO SELECT	Select by letter menu.
A	HELLO BROWN	Auto menu.
A	HELLO FRAME	Catalog with title page.
A	HELLO FREEMAN DAVIS	Auto menu by number.
A	HELLO FROM CAC	Catalog with picture.
A	HELLO IAC	Catalog with scrolling title page.
A	HELLO MASSIMO	Two-column auto menu
I	HELLO TITLE DEMO	Credits, (lo res).
A	HELLO WAGNER	Auto menu.
A	MENU IDEA GOLDING	Menu examples, (not real menus). Six programs.

DISK NO 167		HELLO AND MENU
I	BILLBOARD WYSOCKI	Shows on screen what is wanted in billboard fashion.
I	HELLO APPLE PI LOGO	Catalog with picture.
I	HELLO APPLE-VENTION	Dayton Users Group hello, exit to monitor.
I	HELLO APPLECORPS SAN DIEGO	Catalog with title page.
I	HELLO APPLESIDER	Hello with picture.
i	HELLO CAC 1	Catalog.
I	HELLO CAC 2	"
I	HELLO CALL APPLE	Auto menu.
I	HELLO DELETED FILES	Catalog with deleted files.
I	HELLO FRAME	Catalog with title page.
I	HELLO FREE FULL %	Catalog with free sectors.
I	HELLO GARY FOOTE	Multi-screen auto menu.
I	HELLO GETTING CATALOG	Categorizes by filetype.
I	HELLO KAMINS	Shows how many sectors are free on catalog.
I	HELLO KELTZ	Hello that shows free sectors.
I	HELLO LETTER PUSH	Catalog with one-key program selection.
I	HELLO LETTER SELECT 1	"
I	HELLO LETTER SELECT 2	"
I	HELLO LETTER SELECT 3	"
I	HELLO LETTER SELECT 4	"
I	HELLO LOWER CASE	Catalog with picture.
I	HELLO MELS	Two column auto menu.
I	HELLO PIC	Catalog with animation.
I	HELLO ROUTINE	Catalog with title page.
I	HELLO SAMPLE	Catalog.
I	HELLO SELECTOR	Auto menu.
I	HELLO SOMMERVILLE ET AL 1	Auto menu.
I	HELLO SOMMERVILLE ET AL 2	"
I	HELLO SPLIT CAT	Two-column catalog.
I	HELLO WHITESIDE DENZAU	Auto menu.
B	HELLO.PIC	Picture for menu.
I	MENU IDEA + SUMMARY	Ideas for possible menus. Nine different files.

Math and Statistics

These disks contain programs that are capable of solving operations from the basic to the advanced. They consist of topics in simple arithmetic, algebra, geometry, calculus, boolean mathematics and statistics. Some are text tutorials; others are graphic presentations of mathematical functions and plots.

DISK NO 172		MATH AND STATISTICS
A	ANGLO TO METRIC I	Converts English measurments to metric.
A	ANGLO TO METRIC II	Converts liquid, English measurement to metric.
A	ARCSIN ARCCOS	Arcsin and arccos of any radians.
A	CALCULATOR	Performs basic math functions (+ ,-, * , /).
A	CALCULUS I	Solves integrals and differential equations.
A	CALCULUS II	Same as above, but with instructions.
A	CASH REGISTER	Teaches how to make correct amount of change.
A	CIRCLE AREA CIRCUM	Calculates area and circumference of a circle.
A	COMPOUND INTEREST	Compounds interest at any rate for any period of time.
A	CRITICAL PATH ANALYSIS	Analyses which path an activity will take.
A	CURVE FIT I	Fits a curve to any set of points, plots it.
A	CURVE FIT II	"
A	CURVE FIT III	"
A	DERIVATIVE OF EQUATION	Finds derivative for any equation.
A	DIFFERENTIAL EQN SOLVER	Solves differential equations.
A	EQUATION SOLVER	Solves linear equations with inputted A,B,C.
A	EQUATIONS I	Solves simultaneous equations.
A	EQUATIONS II	Solves simultaneous equations, does matrix operations (+ ,-, *).
A	FACTOR	Guessing game, guess factors.
A	FIBONACCI NUMBERS	Lists the Fibonacci Numbers to 701408733.
A	FOOT CANDLE ANALYSIS	Tells what type of light to use.
A	FOURIER	Computes the Fourier Series with inputted data.
A	FOURIER TRANSFORM	Calculates and plots Fourier transformation.
A	GAUSSIAN QUADRATURE II	Solves integrals with any function.
A	MATH DRILL I	Basic math operations drill (+ ,-, * , /).
A	MATH DRILL II	Multiplication tables drill (1-12).

A	MATRIX INVERSION II	Inverts any size matrix.
A	MEAN VARI STDR DEVIA II	Calculates mean variance and standard deviation of data.
A	MODE FINDER	Finds the number in a group that occurs most often.
A	N FACTORIAL	Finds the factorial of any number less than 34.
A	PLOT CONSECUTIVE REACTIONS	Plots concentration versus time in a consecutive reaction.
A	PLOT FUNCTIONS OF X	Plots a chart for up to 10 numbers.
A	ROBOT MOTOR DESIGN	Instructions to design a robot motor.
A	SINE FUNCTION	Graphically displays sine functions.
A	STATISTICS I	Does permutations, linear regression, correlations, and standard deviation.
A	STATISTICS II	Plots histogram and gives frequency distribution or observations.
A	T TEST STDN DEVIATION	Computes mean and standard deviation of 1-2 data sets.
A	TIME SPEED DISTANCE EXERCISE	Solves distance and word problems.
A	TIME SPEED DISTANCE FUEL	Finds time, speed, and distances.
A	TRIANGLE SOLVER	Finds any unknown in any triangle.
A	UNPAIRED GROUP COMPARISON	Computes means variances and T-rations for two groups of unpaired data.

DISK NO 173		MATH AND STATISTICS
I	ADDITION AND SOUND 1	Addition drill, plays music.
I	ADDITION AND SOUND 2	Addition drill, plays different music.
I	ADDITION DRILL	Addition drill with four skill levels.
I	BESSEL FUNCTIONS	Plots any of 8 Bessel functions.
I	BRAIN BUSTERS	Shows a series of difficult word problems to solve.
I	COIN TOSS	Tosses coin any number of times and keeps average of heads and tails.
I	FRACTION TO DECIMAL	Divides any 2 numbers to any number of decimal places.
I	LIGHT PEN 3 DEMO	Demonstration of a light pen.
I	LIGHT PEN MATH DEMO	Calculator that uses a light pen.
I	MATH AND MUSIC	Math drill (+,-,*,/), plays music when right or wrong.
I	MATH DIVISION 2	Divides 2 numbers with up to 255 places.

I	MATH DIVISION 3	Demonstrates long division, division of two numbers.
I	MATH DIVISION CALC 1	Demonstrates long division of 2 numbers.
I	MATH DIVISION CALC 2	Solves division problems to any number of decimal places.
I	MATH DRILL EASY	Easy math drill (+ ,-, *), (graphics, sound).
I	MATH DRILL HARD	Difficult math drill (+ ,-, *), (graphics).
I	MATH FLASH CARD	Flash card drill (+ ,-, *).
I	MATH HEX QUIZ	Hexadecimal number addition drill.
I	MATH IN COLOR 1	Math drill (+ ,-, * , /), (graphics).
I	MATH IN COLOR 2	Math drill (+ ,-, * , /), (colorgraphics).
I	MATH MULTIPLY 2 NUMBERS	Multiplies, or raises numbers to exponents.
I	MATH MULTIPLY CALC	Multiplies any 2 numbers like a calculator.
I	MATH SUPER	Math drills (+ ,-, * , /), (different levels), with graphics.
I	MATH TUTOR	Math drills, (+ ,-, * , /).
I	NUMBER LOGIC	Four digit Masterminds game.
I	PI 1	Finds pi to any number of digits.
I	PI 2	Finds pi to any number of digits, beeps.
I	SQUARE & CUBE A NUMBER	Squares and cubes any number less than 32.

DISK NO 174		MATH AND STATISTICS
A	ANGLE CONVERSION	Converts degrees to radians and vice versa.
A	ANGLO TO METRIC III	Gives metric conversion of English measurements.
A	AREA OF POLYGON	Gives area of a polygon.
A	BINOMIAL DISTRIBUTION	Calculates probabilities.
A	BLACKBODY	Calculates wavelength and watts with inputted temperature.
A	CHI SQUARE TEST	Gives Chi Square for any number of columns and rows.
A	COORDINATE CONVERSION	Converts polar to cartesian and vice versa.
A	COORDINATE PLOT	Plots inputted points, (text).
A	CURVILINEAR INTERPOLATION	Interpolates Y when X and points are known.
A	DERIVATIVE	Gives any derivative of X.
A	DFIT	Computes log and powers.
A	DIFFERENTIAL EQN SOLVER DEMO	Demonstrates Euler's method of solving differentials.
A	EXPONENTIAL REGRESSION	Shows best location line to be drawn for non-linear points.
A	F DISTRIBUTION	Calculates F Distribution.

A	GAUSSIAN QUADRATURE I	Solves integrals with Gaussian Quadranture.
A	GEOMETRIC MEAN	Gives geometric mean and deviation of any number.
A	GREATEST COMMON DENOMINATOR	Gives greatest commom denominator for any 2 numbers.
A	HISTOGRAM	Shows a histogram graph, (text).
A	LINEAR INTERPOLATION	Gives Y value for next point on a line.
A	LINEAR PROGRAMMING	Gives linear function from inputted constraints.
A	LINEAR REGRESSION	Gives Y value for any X value of a line.
A	MATH DRILL III	Math drills: (+ ,-, * , /).
A	MATH MULTIPLY DRILL	Multiplication drill, (graphics).
A	MATH QUIZ	Musical math drill, (+ ,-, * , /).
A	MATRICES	Multiplies any 2 matrices.
A	MATRIX INVERSION I	Inverts inputted matrix.
A	MATRIX MULTIPLICATION	Multiplies any 2 matrices.
A	MATRIX OPERATION SIMPLE	Adds, subtracts, and multiplies matrices.
A	MEAN VARI STDR DEVIA I	Gives means, variance, and standard deviation.
A	MULTIPLE LINEAR REGRESSION	Calculates points on a line.
A	NORMAL DISTRIBUTION	Gives frequency of X value with inputted mean and deviation.
A	NUMBER COMBINATIONS	Calculates total possible combinations.
A	PARABOLA PLOT	Plots a parabola.
A	PERMUTATION COMBINATION I	Gives total possible number of permutations and combinations.
A	PERMUTATION COMBINATION II	Same as above, but with instructions.
A	POISSON DISTRIBUTION	Gives number of occurrences with inputted frequencies.
A	POLAR EQUATION PLOT	Plots a polar equation.
A	POLYFIT	Solves and plots equations with inputted points.
A	POLYNOMIAL REGRESSION	Plots line best suited to points, (graphics).
A	POWER CURVE FIT (C)	Gives slope and X,Y intercepts for inputted points.
A	PRIME FACTORS I	Gives prime factors of integers.
A	PRIME FACTORS II	Factors any number.
A	QUADRATIC FORMULA	Gives roots of a quadratic equation.
A	QUADRATIC SURFACE	Gives point values over a quadratic surface.
A	RIGHT TRIANGLE SOLVER	Finds length of any side of a right triangle.
A	ROOT FINDER	Finds roots with given inputs.
A	ROOTS OF POLY HALF	Gives roots of a polynomial at half intervals.

A	ROOTS OF POLYNOMIALS	Gives roots and derivations of polynomials.
A	SIMPSON'S RULE	Solves integrals using Simpson's Rule.
A	SIMULTANEOUS EQUATIONS	Solves matrices with inputted equations.
A	T DISTRIBUTION	Finds where T is distributed on a curve.
A	T DISTRIBUTION TEST	Same as T DISTRIBUTION, but with choice of equation.
A	TRAPEZOIDAL RULE	Solves integrals with Trapezoidal Rule.
A	TRIANGLE FACTORS	Finds area of triangle, prints it to screen.
A	TRIANGLE PARTS	Solves triangles given any 3 parts.
A	VECTOR ANALYSIS	Analyses any 2 vectors and gives Alpha.
A	VECTOR OPERATIONS	Does basic math operations with vectors, (+,-,*,/).

DISK NO 175		MATH AND STATISTICS
I	ADDITION QUIZ	Addition quiz, shows numbers with graphic boxes when wrong.
I	COIN TOSS & BINOMIALS	Simulates coin toss and gives averages, solves binomials.
I	EQUATIONS	Graphs any linear equation.
I	GROUP AVERAGES	Finds average of any number of numbers, for any number of groups.
I	MATH DIVISION 1	Divides any 2 numbers, gives answer to any decimal place desired.

DISK NO 176		MATH AND STATISTICS
A	CHESS BOARD	Demonstrates a doubling theory.
A	COMPOUND INTEREST TABLES	Shows amount of interest compounded with inputs.
A	COMPRESSION RATIO	Finds compression ratio for an engine.
A	CONSECUTIVE REACTIONS	Plots concentration versus time for a consecutive reaction, (graphics).
A	CYCLOID	Traces a point that is rotating around a circle, (spirograph).
A	EQUIPROBABLE	Graphically plots random integers and gives high and low occurrences.
A	FUNCTION PLOT I	Tells where a line crosses the X and Y axis.
A	FUNCTION PLOT IA	Same as above, but gives choice of equations.
A	FUNCTION PLOT II	Graphically plots a function.
A	FUNCTION PLOTTER I	Plots any algebraic function, (graphics).
A	FUNCTION PLOTTER II	Plots any function in form Y = F(X), (graphics).

A	FUNCTION ZEROS	Computes rational zeros of an equation.
A	GAMBLERS RUIN	Demonstrates that a gambler loses with any odds found in a casino.
A	HISTOGRAM PLOT	Displays data in a histogram.
A	HYPERBOLA	Finds paramaters of hyperbolas.
A	INTEGRATION	Demonstrates how to solve integrals using Simpson's Rule.
A	LISSAJOUX	Generates a family of curves by changing angles in the polar coordinates.
A	MATH TOTALS	Totals any number of inputted figures.
A	MATH WILLIE WORM	Math drills: (+ ,-, * , graphics).
A	METRIC AREA	Converts English distance to metric distances.
A	METRIC GAS PRICE	Converts price per gallon to price per liter.
A	METRIC KELVIN TEMP	Shows any number of degrees in Centigrade, Fahrenheit, and Kelvin.
A	METRIC KITCHEN	Converts English liquid and weights to metric.
A	METRIC LENGTH	Converts English distances to metric distances.
A	METRIC TEMP	Converts Fahrenheit degrees to Celsius.
A	METRIC TEMP OR WEIGHT	Converts English weights to metric and Fahrenheit to Celsius.
A	METRIC TEMPERATURE	Converts Celsius to Fahrenheit.
A	METRIC VOLUME	Converts English volumes to metric.
A	MONTE CARLO	Plots points randomly and calculates area, (graphics).
A	POLAR COORDINATES	Illustrates how curves are best plotted by polar coordinates, (graphics).
A	POLL	Takes a presidential poll.
A	ROSETTE	Graphically plots polar equations.
A	SIMULTANEOUS EQN AND MATRIX	Matrices, solves simultaneous equations, and quadratic equations, (+ ,-, *).
A	SPHERICAL	Traces a spiral curve in the form of a sphere.
A	SPIRAL2	Plots spirals using polar coordinates.

DISK NO 177		**MATH AND STATISTICS**
A	GREATEST COMMON DENOMINATOR	Finds greatest common denominator.
A	POLAR	Shows curves plotted with polar coordinates.
A	SPIRAL2	Plots a spiral with polar coordinates.
A	GRAPH #2	Graphs using trigonometry functions.

A	AJB SPACE MACHINE	Shows how to solve algebraic equations in story form.
A	RIGHT TRIANGLE SOLUTIONS	Solves a right triangle.
A	MATRIX LECTURE	Short lecture on matrices.
A	POLYGRAPHER	Plots a curve with a user-inputted equation.
A	PRIME FACTORIZATION	Factors any number.
A	BOOLEAN	Evaluates a Boolean expression.
A	DIVIDE AND CONQUER	Demo on division.
A	ALL.BASE.CONVERTER	Converts numbers from one base to another.
A	ALGEBRA 1	Solves and plots linear equations.
A	CALCULATOR	Adds, squares, raises any number to a power.
A	PERMUTATIONS-COMBINATIONS	Gives number of computations of N taken D times.
I	NUMBER BASE CONVERTER	Converts a number from one base to another.
I	HEX-DEC CONVERTER	Converts a hexadecimal number to base 10.
I	CALC PI TO 1000 DIGITS	Gives pi to any number of places.
A	PLOTTER	Graphs a function using the Cartesian coordinates.
A	TRIGO	Plots a circle.
A	SIMILAR	Study of similar triangles.
A	POLYGRAPHER 1	Plots a preselected function.
A	ALGEBRA 2	Computer activities for high school students.
A	POLAR 1	Graphs a polar function.
A	LHSTRIG	Plots a circular function.
A	ALGEBRA	Equations drill.
A	SLOPE	Graphs up to 4 linear equations on Y axis.
A	SEQUENCES	Generates sequences.

DISK NO 178		**MATH AND STATISTICS**
All programs include graphics except as noted.		
A	SECANT	Draws secant lines.
A	NEWTON	Graphic and numerical study of Newton's methods.
A	MOTION SIM	Simulates various motions.
B	SQUARE	"

A	POLAR PLOTTER	Plots an arbitrary function in polar coordinates.
A	FUNCTION AND INTEGRAL	Plots inverted function and its integral.
A	PARAMETRIC PLOTTER	Plots 2-D parametric equations.
A	X-ROTATE	Plots cylindrical cross sections of functions.
A	PARABOLA FITTER	Plots a parabola at any point.
A	PLOT3D OVER RECTANGLES	Plots functions from various perspectives.
A	QUADRATIC SURFACES	Plots quadratic surfaces.
B	SPIDER	Plots a picture of a spider.
A	PIX LOADER	"
A	HARMONIC OSC	Plots solutions to differential equations.
A	DIFFEQU DEMO	"
A	RIEMANN RECT	Gives approximate area for curves under rectangles.
A	CAUCHY	Solves differential equations, (text).
A	R = COS(N * THETA)	Plots R = cos(N * 0) in polar coordinates.
A	PARABOLAS	Plots 7 parabolas.
A	AREACUBICRECT	Computes approximate areas of any polynomial.
A	QUADRATICS	Plots a quadratic.
A	REFLECTIONS AND ROTATION	Rotates and reflects a geometric object.
A	TOMKLEENROSES	Plots R = cos(N * O) for any variable.
A	TOMKLEENROSES11	"
A	NEWTON'S METHOD	Graphs a function and finds the root.
A	EQUIPROBABLE	Plots 1000 random points.
A	MONTE CARLO	Plots a randomly processed area.
A	CYCLOID	Traces a point rolling around a circle.
A	ROSETTE	Traces rose petals around an origin.
A	SPHERICAL	Draws a sphere.
A	LISSAJOUX	Documents a group of curves.
A	TRIANGLE ILLUSION	Plots triangles that form an optical illusion.
A	SPEP	Expands polynomials, (text).
A	PARABOLIC CALCULATIONS	Displays a parabola.
A	PARABOLIC ERROR	Calculates limits of a focus of a parabola.
A	LAPLACE INVERSION	Displays time domain of an inputted formula.
A	LAPLACE INVERSION. DOCUMENTATION	Documentation for LAPLACE INVERSION.

DISK NO 179		**MATH AND STATISTICS**
A	APPLESOFT DEMO	Finds x relative to f(x).
A	ARCHIMEDES SPIRAL	Plots an Archimedes spiral.

A	CONIC GRAPHER	Graphs equations with conic equation.
A	FFT TUTORIAL	Teaches musical notes by ear.
A	FAST FOURIER TRANSFORM	"
A	MULTIPLE LINEAR REGRESSION	Solves problems in algebraic equations.
A	SIMULTANEOUS EQUATIONS	"
A	FEM/FEMPLT INFORMATION	Explains the finite elements method.
A	FEM	"
A	FEMPLT	"
A	TRANSISTOR PARAMETERS	Makes a table for corresponding values of Beta.
A	SIN PLOT	Plots a sine wave.
A	BINOMIAL DISTRIBUTION	Gives probability of number of successes in a number of trials.
A	FAST FOURIER TRANSFORM 1	Gives a list of the real or imaginary parts of a complex wave.
A	HARMONIC ANALYSIS	Plots 5 harmonics for wave-form input.
A	QUADRATIC SURFACE	Generates values of f(x,y).
A	HEX CONV	Converts hexadecimal numbers to decimal and vice versa.
A	GREAT CIRCLE	Calculates bearings of circles.
A	DICE.STATS	Compares results of 500 dice throws.

Music

A wide selection of music and sound effect programs are included on these disks. Some programs allow the user to play a variety of pop, classical, and children's tunes. Others enable the user to compose works and create sound effects. Graphics often accompany these tunes.

DISK NO 182		MUSIC
B	MUSIC ALLEY CAT.X	Plays "Alley Cats".
I	MUSIC APPLE ORGAN	Selection of tunes on the organ.
I	MUSIC APPLEODION	Play tunes or compose your own.
I	MUSIC BACCH	Play or manipulate music by Bach.
I	MUSIC BACH SQUARES 1	Music by Bach with graphics.
I	MUSIC BACH SQAURES 2	"
I	MUSIC BUGLE	Plays a bugle tune.
I	MUSIC CHILDRENS	Selection of children's tunes with words.
I	MUSIC FLAG	Plays National Anthem while raising flag, (graphics).
I	MUSIC ODE TO JOY	"Ode to Joy" by Beethoven.
I	MUSIC PAK 1	Sound demo: 2 voices, control pitch, and tempo.
I	MUSIC POTPOURRI	Medleys and phrases—pop and classical tunes.
I	MUSIC SMALL WORLD	Plays "It's a Small World".
I	MUSIC SYNTHESISED	Keyboard controls parameters, (simple).
I	MUSIC TEMPERED SCALES	Plays a tune.
I	MUSIC VOICE	Selections suitable for voice harmonies.
I	MUSIC WRITER 1	Helps compose your own music.
I	SOUND EFFECTS MUZAK	Sound effects and noises.
I	SOUNDS BY HART	Plays sound effects.
I	SOUNDS ROUTINE	Plays more sound effects.
A	XMAS SONG PRINTED	Prints "The Twelve Days of Christmas".

DISK NO 183		MUSIC
I	HANON ETUDE #1 IN C	Plays from slow to fast tempo.
A	HARMONIC ANALYSIS	Calculates Coefficient of Fourier Series.
I	MUSIC COMPUTER	Compose music with specified pitches and rhythm.
I	MUSIC FUNCTIONS	Use as vibe or organ, play or compose music.

I	MUSIC GEE	Plays a tune.
I	MUSIC IN IB	Compose by selecting pitches and tempo.
I	MUSIC MAKER	Compose with preselected tunes and scales.
I	MUSIC MOZART THEME	Play Mozart theme with 2 voices.
A	MUSIC START	Plays beginning phrases of melodies.
I	MUSIC TWO VOICES	Plays pop tunes in 2 voices.
I	MUSIC WRITER 3	Write or play composition of up to 500 words.
I	MUSICAL KEYBOARD	Replaces video with tones. Machine language.
A	MUSICAL MEMORY	Loads and saves your composition.
I	NAME THAT TUNE	Tune-guessing game for 2 players.
I	SOUND EFFECTS DEMOS	Nine sound effects: bionic cricket, death ray, drop, and others.
A	SOUND EFFECTS HOW TO	Program your own sound effects.
I	SOUND EFFECTS RANDOM	Plays random sound effects.
A	SOUND ROUTINE	Control pitch and duration of note.
I	SOUNDS AND MUSIC STARWARS	R2D2, Blaster, Tiefighter, and "Star Wars" Theme.
I	SWANEE RIVER	Plays tune in different keys and tempos.

DISK NO 184		MUSIC
I	MAESTRO INTRO	Plays 35 selections from classical, pop, and old favorites with graphic representation of the pitches: "William Tell Overture", "Flight of the Bumble Bee", "The Entertainer","Pink Panther", "Theme from Star Wars", etc..
B	MAESTRO.DATA 1	Data and tone test for the above selections.
B	MAESTRO.DATA 2	"
B	MAESTRO.DATA 3	"
B	MAESTRO.DATA 4	"
B	MAESTRO.DATA 5	"
A	TONE TEST	Tone test.

DISK NO 185		MUSIC
I	APPLE MUSIC MAKER	Compose your own tune or listen to 1 of the 6 routines.
I	APPLE ORGAN	Instructions for building an Apple Organ, and a collection of tunes.
A	BACH	Short selection by Bach, (lo res graphics).
T	BEETHOVEN'S 9TH	Play or compose songs: edit, play back, save.

A	BIRTHDAY	Plays the Birthday tune accompanied by lo res firework graphics.
I	E/MUSICAL MATH TEACHER	Elementary math teacher that plays a tune after a problem.
A	EXOTIC SOUNDS	Generates exotic sounds.
A	FAST.FORWARD.MUSIC	A video/visual quiz on note identification.
A	HI-RES.METRONOME	A metronome in hi res, control the tempo with paddle.
A	INTRO SING.FINGERS	Make sounds from the keyboard.
B	KEYBOARD ORGAN	Play like an organ using the keyboard.
A	MICKEY	Plays "Mickey Mouse" song.
A	MUSIC STARTER	Plays Bach "Prelude #2" and "Telemann Fugue".
A	MUSICIAN	Edit or play back your own composition.
A	MUSIC NOTES WITH OCTAVE NOS	Displays the notes and their POKE value.
A	PLAY THAT TONE AGAIN SAM!	Generate a sound by selecting a frequency and duration.
A	SIMPLE.SIMON	Match tones and colors.
B	SINGING FINGERS	Make sounds from the keyboard.
B	SAINTS.OBJ	Plays the "Saints Go Marching In" song.
A	SIREN	Sound effects of a police siren.
A	SOMEWHERE OVER THE RAINBOW	Plays a song of the same title.
A	SONG.WRITER	Write your own song from the computer.
B	BSOUND MAKER	Shows the effect on sound when tones and duration are put into an assembly routine.
B	SOUND1(CALL2921).	Sixteen programs, each demonstrates a different sound: gun shots, click, siren, forcefield, buzzer and others.
A	SOUND BY WAGNER	Generate sounds by changing tone and duration.
I	TWOVOICE II	Plays "The Candy Man", "Bare Necessities", "The Entertainer", and "The Godfather".
A	UP & DOWN THE SCALE	Plays 1 scale up and down, (graphics).
T	WILLIAM.TELL.OVERTURE	Part of the SONG.WRITER file.
A	TONES & DURATIONS	Shows the effects on sounds produced by the computer when different tones and durations are poked into an assembly routine.

Passtime

Passtime disks are a potpourri of programs. One program prints a calendar or a banner, another turns your computer into a decision maker or a psychoanalyst. Programs range from the practical to the absurd—from water conservation to an ESP test.

DISK NO 195		PASSTIME
A	BIORHYTHM	Plots biorhythm curve for any period.
A	BIRTH/ANNIVERSARY LIST	Make list of 150 entries, deletes, edits or prints.
A	CALENDAR	Displays monthly calendar, or calculates days between dates.
A	CALORIE COUNTER	Determines the calorie count of various foods or an entire meal.
A	DIET	Uses age, height, weight, and physical activity to estimate daily requirements.
A	GRANDAPPLE CLOCK	Clock with chimes, tick-tock, alarm and pendulum, (hi res).
A	INTRUDER.ALERT	Bogus warning system graphically boasts that it has detected an intruder.
A	LONGEVITY	Estimates life expectancy by lifestyle and background.
A	MOVIE LIST	Creates an index for your video cassettes.
A	NFL.RANKER	Input, display and update the ranking of NFL teams.
A	PIG.LATIN	Input a normal word, program translates it into Pig Latin.
A	RECIPE.CATALOG	Database program for maintaining recipes.
A	SPEED.READING	Helps improve reading habits and reading speed.
A	SUPER.SCORES	Scorekeeping program.
A	TEXT WRITER B1	Simple word processing program: edits, saves and prints text, scrolls up and down, deletes words or paragraphs, and inserts words.
A	WEIGHT.CALCULATOR	Calculates ideal weight according to your height and wrist size.

DISK NO 196		PASSTIME
A	ANALYST HECTOR	Acts as an analyst. Simple program.
A	BIO CYCLE	Figures biorhythm for as many days as specified.
A	BIRTHDAY PROBABILITY	Probability that 2 people have birthdays on the same day.
A	BOOZE N YOU	Shows the effects of drinking.
I	COLOSSUS	Banner program with some graphics; banner moves from left to right continuously.
A	DAY OF THE WEEK I	Plug in any date, tells which day of the week it is.
A	DAY OF THE WEEK II	Same as above with more programming listed.
A	DAYS BETWEEN TWO DATES	Figures the days between any 2 given dates.
A	DECISION MAKER II	Aids in making a decision by figuring the importance of the inputted criteria.
I	DIRTY TRICKS BEWARE	Watch the computer do strange uncontrollable things.
A	ELECTRICITY COST (C)	Calculates cost per item per month in household.
A	ESP TEST	Guess symbols before they appear on screen.
A	FREUD	Simple computer analyst asks questions.
A	GRAMMAR MAD LIB	Supply nouns, verbs, etc., computer tells a story.
A	GREETINGS	Shows how to make a greeting.
A	HOUSE PLANTS	Gives plant care for many common plants.
A	JUMBLES MNEMONICS	Shows how many ways 6 letters can be jumbled.
A	LADDER ANGLE SAFETY	Tells how far from house to place ladder.
A	LIFE BAKER	Predicts population and location of the given pattern of organisms.
A	MAP CHECK	Uses quadrant, degree, minutes, seconds and distances.
A	MIND READER	Computer guesses what number is being viewed.
A	ONE LINER 2 ?	Centers the title on the screen.
A	SAILBOAT STAYS	Given mast height and distance, it figures stays.
A	TOUT	Evaluates horse's track record. Aids in successful betting.
A	VOWEL FINDER	Tells how many vowels are in a word.
A	WATER CONSERVATION	Tells gallons of water used per day in house.
A	WEATHER FORECAST	Give specifics, it gives 77% accurate forecast.
A	WEEKDAY FROM 1582	Tells how many years you have been alive, asleep, relaxing and working since birthdate.

DISK NO 197		PASSTIME
I	AD LIB 1	Supply some of the words to a story.
I	ANALYST COMPUTER 2	Simple question and answer analyst program.
I	CALENDAR PERPETUAL	Displays a month on the screen at a time, prints.
I	COMPUTER RALPH	Eleven simple, fun word games—Who Am I, etc..
I	DECISION MAKER	Helps organize information and choose the best probability out of several alternatives.
I	HOROSCOPE	Very simple horoscope reading.
I	LIFE CONWAY	Version of the game of Life, about genetic reproduction, (graphics).
I	LIFE GANDERS 1	Another version of the game of Life.
I	LIFE GANDERS 2	"
I	LIFE HERTZFELD	"
A	MILES PER GALLON RECORD	Figures miles per gallon and the cost.
I	MIRROR PRINT IMAGE	Displays mirror image of a word.
I	POET	Adds the last line to a poem.
A	PROBABILITY	Figures probability for 2 birthdays being on the same day.
I	RANDOM WORDS 2	Gives random words using as many letters as requested.
I	STOP WATCH	Acts as a stopwatch.
I	TEASER	Something to tease the novice programmer.
I	TIMER	Counts down minutes and seconds, and shows time.
I	TRILLION STORIES	One hundred short stories, change wording, print.
I	UNBELIEVABLE	Flashes words on screen.

DISK NO 199		PASSTIME
I	ANALYST COMPUTER 1	Helps solve problems dealing with sex, money, health, and job.
I	CALENDAR	Enter year and month to print calendar.
A	CLASSIFIER	Loads and saves data tape, classifies a specimen, adds data to a file, and prints list of classified species.
I	EASTER DATES	Calculates date of Easter for any year between 1582 and 8182 AD.
I	ENGLISH QUIZ	Drills on nations, capitals, and parts of speech.
I	GRAMMAR AND BEAUTY	Fill in nouns, adverbs and verbs.
I	HAIKU AND POETRY	Teaches how to write a haiku poem.

I	LIFE OPERATING SYSTEM	Version of the game of Life, genetic reproduction.
I	LIFE SUPER	Version of Life.
B	LIFE1.LIFE	"
B	LIFE2.LIFE	"
B	LIFE3.LIFE	"
B	LIFE4.LIFE	"
I	MEMORY AID	Aids memorization of a sentence or phrase.
A	NFL RANKER	Input mark ups and previous scores and computer will rank teams and predict winners.
A	PIG LATIN	Transposes words into Pig Latin.
I	PHOTO COLOR QUIZ	Color quiz: Primary, complementary and more.
I	PHOTO FILTER QUIZ	Light quiz: Transmission, absorption, and reflection.
A	SUPER.SCORES	Database that keeps high scores for computer games.

DISK NO 200		PASSTIME
A	LUCY	Write notes to Lucy and Lucy writes back.
A	ASTRONOMY-EXPOSURES	Provides exposure times for photographing common celestial objects.
A	ED'S TEMPERATURE CONVERTER	Converts Fahrenheit to Celsius and vice versa.
A	CRYPTOGRAMS	Prints a cryptogram to solve.
A	TELEPHONE DIALER (NO MODEM)	Produces clicks on the speaker, for a dial type telephone.
B	SILENTYPE BOLD PRINT	Sets silent type printer to print bold.
I	BOLD PRINT DEMO	"
I	AN APPLE USERS MEETING	Displays sad and happy faces.
A	GAMBLER'S RUIN	Shows how a gambler is ruined even if the odds are even.
I	MORSE CODE	Converts phrases to Morse code.
I	SLOT MACHINE	Use paddle to simulate slot machine.
I	DRIVER'S TEST	Sixty-three questions on vehicular code.
I	ADD-LIBS	Enter words to the computer's prompts and the computer writes a hilarious story.

DISK NO 201		PASSTIME
A	BICYCLE GEAR RATIOS	Computes gear ratios for bikes having 5 or more gears.
A	CASTLE	Graphics display of castle being destroyed by cannon fire.
A	TEMPERATURE INTERFACE	Circuit chart to build a thermometer for the Apple.
B	TEMPERATURE SCHEMATIC	"
A	TIME & TEMPERATURE	Outputs time and temperature every 5 minutes.
A	PATTERNS	Use paddles to create patterns.
I	WASHINGTON	Drawing of George Washington.
I	LINCOLN	Drawing of Abraham Lincoln.
B	HIRES.OBJ	"
A	FREUD	Solve your problems by conversing with Freud.
A	CROCKPOT COOKING TIME	Tells cooking time for high and low temperatures.
A	TONGUE-IN-CHEEK	Enter a 3-digit number to obtain a buzz phrase.
A	ODD FELLOW	Short story for programmers.
A	POLYCONTRAST CONVERSIONS	Calculates exposure time for Kodak polycontrast photographic paper.
A	BRACKET WORM	Graphic display of worm filling screen with dots and then eating them.
A	ROTATING TEXT	Rotating text display.
A	CALCULATOR (DISK)	Use the computer as a calculator.
A	CALENDAR	Enter the year and month and get a calendar that starts at that month.
A	RIDDLE	Ask the Apple a riddle.
I	ROM ON PARADE	March "Rom" the Robot around, by use of the keyboard.
I	ROM TIC-TAC-TOE	Play tic-tac-toe against "Rom".
A	HAPPY.BIRTHDAY	Type a person's name and computer plays happy birthday song.
A	BUZZ.PHRASE.GENERATOR	Creates randomly generated buzz phrases.
A	HEADLINES	Creates headlines from textfiles.
T	NOUNS	"
T	VERBS	"
T	ADJECTIVES	"

A	BOAT.SHOPPING	Gives price and size data for 18 boats.
A	SCREENSIZE	Shows size of screen.
A	MOVIE LIST	Create a database by movie ratings.
A	QUILT.PROGRAM	Aids in designing and sewing quilts.

DISK NO 202		PASSTIME
A	RUBIK	Solve Rubiks Cube by turning planes. Requires color monitor.
A	RUBIK-RANDOM	"
A	RUBIK-PLOT	"
A	RUBIK-ROTATE	"
A	RUBIK-END	"
A	CHAIN	"
A	BIORHYTHM PRINTER	Prints a biorhythm chart.
A	BRAKING DISTANCE	Calculates braking distance for a car under various circumstances.
A	POKER DICE MK V	Poker dice game.
A	BENCHMARK	Finds all prime numbers between 1 and 1000.
A	MORSE CODE	Sends Morse code to Apple speaker.
A	APPLE SCREENWRITER	Writes funny, short science fiction stories.
A	GIL & SULLY	Graphic highlights of Gilbert and Sullivan.
A	APPLE STOPWATCH	Minutes, seconds, and hundredths are calculated with the space bar.
A	ELECTRIC LETTERHEAD	Designs letterheads.
A	JURY	Computer simulation of the jury selection process.
A	STOPWATCH	Turns the Apple into a stopwatch.
A	WHAT I DO PART 1	Demos showing what the Apple can do.
A	WHAT I DO PART 2	"
I	DECISION	Aids in decision making based on specified criteria.
B	COMPUTERS.DECSN	"

Utilities

These programs enable the user to stretch the capabilities of his system to its fullest. They aid in interfacing the operating system with the various hardware and facilitate the manipulation of programs.

DISK NO 213		BEST OF UTILITIES
A	CATALOG HEADER	Places up to 5 title lines in catalog.
A	CATALOG MANAGEMENT - EDIT	Writes information for all files on disk.
A	CATALOG READ	Reads a file.
A	DISK ARRANGER	Sets up a catalog in any order, adds titles.
A	DISK ARRANGER INSTRUCTIONS	Instructions for DISK ARRANGER.
A	DISK ARRANGER.EXP	File used by DISK ARRANGER.
B	DISK CHECK	Checks if disk sectors are working.
A	DISK CHECK INSTRUCTIONS	Instructions for DISK CHECK.
A	DISK FREE SPACE	Tells space left on disk and extras.
B	DISK MAP	Map of where information has been saved.
A	DISK MAP PROGRAM	Used with DISK MAP program.
A	DISKCAT	Sets all titles in disk's library in files.
A	DISKSCAN	Scans disk for bad sectors, prints out.
B	FAST.LOADER	Used by FASTBOOT CREATE.
B	FAST.RWTS	Used by FASTBOOT CREATE.
A	FASTBOOT CREATE	Creates a fast boot on disks.
B	FIDGET	Better version of FID from System Master.
A	FIDGET INSTRUCTIONS	Instructions for FIDGET
A	FP LIST INSTRUCTIONS	Instructions for FP LIST.
A	FP LISTER.EXP	Lists programs in a better format.
B	KRUNCH	Removes spaces in catalog left by delete.
A	MEMORY DMP	Dumps memory to screen and printer.
A	MEMORY DMP REMARKS DO NOT RUN	Instructions for MEMORY DMP, load and list.
A	MENU (ONE KEY)	Menu to use for your own disks.
A	NAME CHANGER	Renames DOS 3.3 disks.
B	PDQ	Quick copy program for unprotected disks.
A	PDQ INSTRUCTIONS	Instructions for PDQ.
A	PREFIX ADD	Adds prefix to file names for program type.

A	PREFIX ADD INSTR	Instructions for PREFIX ADD.
A	PREFIX REMOVE	Removes prefix.
A	SHOW CTRL	Shows control characters in catalog in inverse.
A	UNDELETE	Replaces files in catalog which were deleted.
A	UNDELETE INSTRUCTIONS	Instructions for UNDELETE.
A	DISK FULL > > > >	Move program which saves files to new disks.

DISK NO 214		UTILITIES
A	ALPHABETIZE	Sorts a list of words alphabetically.
A	APPEND FILE	Instructions for the "append" command.
A	AUTOBOOT 16	Boots a 16-sector disk.
A	BSTAT HOW TO	Instructions to set address/length of binary file.
A	BSTAT II	Gets address/length of binary file.
A	CATALOG SORTER	Sorts a file alphabetically.
A	COMMAND GENERATOR	One-key macro generation.
A	COMP-X MONITOR (C)	8080 monitor.
A	DEBUGGING AID	Lists program segments.
A	DECIMAL POINT	Rounds numbers to the nearest decimal.
A	DOS COMMAND FINDER	Finds addresses of DOS commands.
A	DOS COMMAND FINDER REV	Finds addresses of DOS commands, revision.
A	DOS SHORT COMMANDS	Abbreviates DOS commands.
B	DOS SHORT.RESTORE	"
A	DUMP TRACK AND SECTOR	Views a disk sector.
A	EXEC FILE GENERATOR	Generates an exec file with explanation.
A	FREE SECTORS DOS PATCH	Modifies DOS to give free sectors on catalog.
A	JUMP POINTS DOS 3.2	Address of DOS 3.2 commands.
I	LIBRARY REVIEW INPUT	Disk library management system.
A	LIBRARY INPUT CORRECTOR	"
A	LIBRARY REVIEW	"
T	LITERAL	Allows ":" and ";" in input string.
A	LITERAL INPUT	"
A	LOMEN HIMEM AB	Prints decimal lomem and himem to screen.
A	MEMORY AVAILABLE RAM ONLY	Frees memory for RAM version of Applesoft.
B	MEMORY CHECK 6502	Tests specified memory range.
A	MEMORY CLEAR	Clears memory from $300 to $3CF and $800 to $C00.
I	MOTOR SPEED	Tests disk drive speed.
A	MOTOR SPEED DOC	Documentation for MOTOR SPEED.

T	NAMES	Phone list system.
A	NAMES FILE CREATE	"
A	NAMES FILE EXCH	"
A	NAMES FILE READ	"
A	PRINT USING I	Formatting subroutine.
A	PRINT USING II	Print using simulation.
A	REMOVE STRING SPACES	Compresses a specified string.
A	SORT NUMBERS WOODRUM	Sorts algorithms and demos.
A	SORT QUICK ALPHA	"
A	SORT QUICK NUMBER	"
A	SORT WORDS II	"
A	STRING REVERSE FUNCTION	Prints words backwards.
A	STRING SAVE DEMO	Instructions to save strings to tape.
A	SUPER CATALOG BUILDER	Builds a catalog on a file.
A	SYSTEM CONFIGURATION	Tells what cards you have in the Apple.
A	TAPE RECALL DATE	Saves and loads variables to tape.
A	TAPE STORE DATA	"
A	THROTTLE	Joystick controls list speed.
A	TOKEN ADDRESS TABLE II	Explanation of tokens.
A	TOKEN ADDRESS TABLE III	Location of tokens.
A	VARIABLES DISPLAY	Displays current variables and values.
A	YES NO AND PAUSE	"Get" statement tutorial.

DISK NO 215		UTILITIES
I	APPEND B TO AB FILES	Appends machine language to Applesoft files.
I	BASIC INTERPRETER SET	Lists Integer BASIC tokens.
I	CATALOG TRACK LISTER	Catalog in BASIC.
I	CHARACTER GENERATOR INSTR	Hi res character generator instructions.
I	CHARACTER GENERATOR PROGRAM	Hi res character generator.
I	CHARACTER GENERATOR SAMPLE	"
I	CHARACTER GENERATOR YOURS	"
I	COPY ALDRICH 1	Two-drive copy program.
I	COPY ALDRICH 2	"
I	COPY ALDRICH 3	"
I	COPY BINARY FILE 1	Copies a binary file, 1 drive.
I	COPY BINARY FILE 3	"

I	COPY GWB 1	Two-drive copy program.
I	COPY GWB 2	One-drive copy program.
I	COPY LHS	Whole disk copy program.
I	DISK MARK	Fixes bad disk, DOS 3.2.
I	DOS VERSION?	DOS version number.
I	DUMP HIRES PIC	Copies hi res picture to printer.
I	ED0 DOC	Text editor documentation.
B	ED1	"
I	ED2	Text editor.
T	ED3	"
I	EDIT ASSM	Editor and assembler.
I	EXEC FILE CREATE	Makes an exec file.
I	FRESH DOS	Replaces DOS on disk.
I	HIT ANY KEY TO CONTINUE	Waits for key press.
I	LIST PAGE	Lists programs, one screen at a time.
I	LIST SLOW 1	Slow program listing.
I	LIST SLOW 2	Slower program listing.
I	LIST STOP IB	Stop/start program listing.
I	LIST VERY SLOW	Slower program listing.
I	LOMEM HIMEM IB	Lomem and himem for Integer BASIC.
I	LOOP	Waits for key press.
I	NO VOL ID CHK 3.1 ONLY	Fixes DOS 3.1.
I	PADDLE SWITCH TEST	Tests paddles.
I	PDL SWITCH COLOR TEST	"
I	POKE MACH LANG INTO MEM	Instructions to enter machine language programs.
I	RAM TEST 48K	Tests 48K of RAM.
I	REPLACE CRASHED DOS	Replaces DOS on disk.
I	SHORTEN COMMANDS	Shortens BASIC commands.
I	TAPE DATA DISPLAY	Displays some tape data.
I	TITLE CENTERING ROUTINE	Centers string on screen.
I	TYPING VERTICAL	Displays a message vertically.
I	UPPER LOWER CASE	Produces lower case letters. Hit escape key to change a specific letter to upper case.

DISK NO 216		UTILITIES
A	BASE CONVERSION CHART I	Hex/decimal chart.
A	BASE CONVERSION CHART II	Hex/decimal/ASCII chart.
A	BASE CONVERT **	Converts hex/decimal/binary.
A	BASE CONVERT BEYMER	Hex/decimal/binary base conversion.
A	BASE CONVERT ELLMERS	"
A	BASE CONVERT JENKINS	"
A	BASE CONVERT MASSIMO	"
A	BINARY TO FP	Puts BLOAD file in data.
A	CALENDAR AND POSTERS	Makes a calendar.
A	CAPTURE A PROGRAM	Makes an exec file from a program.
A	CATALOG PRINTER	Prints disk catalog.
A	CLEAR MEMORY	Clears memory in computer.
A	COPY TEXT FILE I	Two-drive text file copy.
A	COPY TEXT FILE II	"
A	COPY TEXT FILE III	"
A	CTRL CHAR CATALOG	Catalog showing control characters.
A	CTRL CHAR REVEAL	Flashing control characters.
A	DUMP ASCII MEMORY	Displays memory as ASCII.
A	ERASE HIRES SCREEN	Erases HGR screen.
A	FORMAT #	Shows numbers with ",", rounds formatted numbers into columns, and rounds off into decimals.
A	FREE SECTORS ALDRICH	Frees sectors on disk.
A	FREE SECTORS BROWN	"
A	ILLEGAL COMMANDS	Fools Integer BASIC.
A	LIST PAGE DIAZ	Lists one page at a time.
A	LIST PAGE WYSOCKI	"
A	MACH TO POKES CONV	Converts BLOAD to POKE statements.
A	MUSICAL KEYS	Emit tone when key is pressed.
A	PHONE DIALER	Dials phone from Apple, using the modem.
A	POINTERS	Displays vital statistics.
A	PR#6 ON RESET	Reboots on reset.
A	RANDOM SENTENCE	Makes sentences.
B	REM STRIPPER	Deletes remarks from program.
A	REM STRIPPER DOC	"
A	RENUMBER	Renumbers an Applesoft program.
A	RENUMBER MERGE	"

A	REVERSE PRINT	Prints strings from right to left.
A	SORT CATALOG	Alphabetizes disk catalog.
A	SORT CATALOG->NEEDS WORK	"
A	SSM AIO BOARD	Dumb terminal.
A	STRING COMPARATOR	Compares two strings.
A	STRING IN A STRING SEARCH	Searches for a string.
A	TEXT FILE EDIT	Text file utilities.
A	TEXT FILE PEEK	"
A	TEXT FILE READ	"
A	TEXT FILE READ AND PRINT I	Reads or gives hardcopy of file.
A	TEXT FILE READ AND PRINT II	"
A	TEXT FILE WRITE	"
A	TOKEN ADDRESS TABLE I	Applesoft token display.
A	UTILITY STATEMENTS	Useful subroutines.

DISK NO 217		UTILITIES
A	AUTO NUMBER I	Automatic line numbering.
A	BENCHMARK	Bar chart.
A	BSTAT I	Length and address of binary file.
T	BUTCH	Saves variables to disk.
A	BUTCHER	"
A	CHARACTER DECODER	Base conversion.
A	DUMP MEMORY AND ALTER	Edits memory.
A	DUMP PAGE	"
A	EDIT FILE	Edits a text file, multi-featured.
A	EDIT FILE DOC	"
A	FORMAT $	Formats dollar notation.
A	FORMAT $ AND CTS	Transforms numbers to dollars and cents.
A	FORMAT %	"
A	IB TO AB	Converts Integer BASIC to Applesoft.
A	INVISIBLE SIGNATURE	Hides signature in code within program.
A	LIST STOP AB	Lists start/stop on key press.
A	UNDELETE	Restores deleted files to catalog.
A	UNDELETE INSTRUCTIONS	Instructions for UNDELETE.
A	ROMAN NUMBERS	Counts from 1 to 1999 in Roman numerals.

A	SORT ALPHA	Sorting routines with demos.
A	SORT ALPHA OR NUMBR I	"
A	SORT ALPHA OR NUMBR II	"
A	SORT ALPHA SHEL-METZ	"
A	SORT HEAP	Sorting routines with demos.
A	SORT HEAP REV	"
B	SORT ML	"
A	SORT NUMBERS	"
A	SORT NUMBR SHEL-METZ	"
A	SORT SHEL-METZ	"
A	SORT WORDS I	"
A	TYPE SETTER	Justifies a string.

DISK NO 218		UTILITIES
I	AUTHORSHIP	Displays a name in lights!
I	BASE CONVERSION CHART	Base conversion programs.
I	BASE CONVERT	"
I	BASE CONVERT GARSON	"
I	BASE CONVERT WILLIAMS	"
I	BASE CONVERT WILLIAMS GOLDING	"
I	BASIC->MONITOR	Monitors commands from BASIC.
I	CATALOG BUILDER	Makes file catalog.
I	CATALOG LISTER	Reads the catalog file.
I	COPY BINARY FILE 2	Copies binary file.
I	COPY SINGLE DRIVE 1	Copies entire disk with single drive.
I	COPY TEXT FILE	Copies a text file.
I	CTRL CHAR FIND	Displays control characters as flashing.
I	DISK SPACE SUMMARY	Displays free sectors.
I	DISK TO TAPE ALDRICH	Copies file to tape.
I	DISK TO TAPE DUMP	Copies a disk file to tape.
I	DISK TO TAPE SAVE 6	"
I	DISK TO TAPE SAVE 6 REV	"
I	DISK TO TAPE WRITE	"
I	DOS COMMAND CHANGER	Changes DOS 3.2 commands.
I	DUMP DISK OR TRACK	Dumps a disk to printer or screen.

DUMP DISK OR TRACK (C) 1	Dumps a disk to printer or screen.
DUMP DISK OR TRACK (C) 2	"
DUMP DISK OR TRACK (C) REV	"
FILE HANDLER SAMPLE	File handling demo.
FORMAT REMARKS	Attractively formats remarks.
IB CAPTURE	Puts Integer BASIC program in text file.
IB TO AB 1	Changes Integer BASIC program to Applesoft BASIC.
IB TO AB 2	"
IB TO AB ALDRICH	"
LIST STOP	Stop/start program listing.
MAP SECTORS PAYMAR 1	Reads file and gives map showing free sectors.
MAP VTOC	"
MEMORY SPYING	Examines memory.
MEMORY TEST FAST	Tests specified range of memory.
MEMORY TEST SLOW	"
MOVIT BYTES	Moves a memory range.
MUSICAL KEYS	Emits tone when key is pressed.
PASSWORD KEY	Security program.
PATTERN SEARCH	String utility.
SECTOR RECOVER	Recovers "lost" sectors.
SECTOR RECOVER DOS	"
STRING CONCATENATION	Lists management in Integer BASIC.
TEXT FILE CREATE	List create program for text file.
TEXT FILE READ	Read create program for text file.
TEXT FILE READ OR WRITE 1	Allows writing or reading of text file.
TEXT FILE READ OR WRITE 2	"
TEXT FILE WRITE	Writing of text file in Integer BASIC.
TEXT TOKEN FIND	Searches for a string in a program.
VTOC RECONSTRUCT DOC	Restores "lost" sectors.

DISK NO 219		UTILITIES
I	AUTO NUMBER	Use for easy program entry.
I	BSTAT DECIMAL	Address length of BLOAD file.
I	BSTAT GOLDING TAYLOR 1	Shows starting and ending address of different files, saves.
I	BSTAT GOLDING TAYLOR 2	"
I	BSTAT HERTZFELD FONG 1	"
I	BSTAT HERTZFELD FONG 2	BSAVE file.
I	BSTAT HERTZFELD FONG HOAG	BLOAD file specs.
I	BSTAT LHS 1	Five programs that show the starting address and length of all files on disk, binary only.
I	BSTAT TUBS	BSTAT plus other functions.
I	CATALOG INPUT	Keeps track of disk library.
I	CATALOG PROCESS	"
I	CATALOG LAZY	Catalogs disk without having to type catalog.
I	DELETE FILES	Deletes all unlocked files.
I	DISK FULL FLASHING	Saves file as flashing filename.
I	DISK FULL INVERSE	Saves file as inverse filename.
I	DISK HELPER	Nine DOS utilities: lock every file, unlock every file, delete unlocked files, and modify sector length.
I	DUMP PAGE	Examines memory.
I	EDIT 2	Better editing functions. Includes up, down, left, right, home, clear screen, insert character, and clear line.
I	FREE SECTORS	Lists free sectors.
I	FREE SECTORS OR SO	"
I	FREE SECTORS PORTER	"
I	LIST SLOW PDL 0	Slows down listings.
I	LIST STOP DUNMIRE	Starts and stops listings.
I	LISTER	Lists options.
I	LOCK FILES	Locks unlocked files.
I	LOWER CASE INPUT DEMO	Inputs strings in lowercase.
I	MAP SECTORS LHS	Shows sector bit map.
I	MAP SECTORS PAYMAR 2	"
I	MEMORY AVAILABLE 32K ONLY	Tells how much memory is left.
I	MEMORY TEST WAXER	Tests memory.

I	RAM TO ROM AB	Converts programs from RAM Applesoft to ROM version.
I	RENUMBER	Renumbers a program.
I	RENUMBER APPEND	"
I	RENUMBER WARNING	"
I	SECTOR COUNT FIX	Fixes file sizes.
I	SECTOR READ WRITE	Examines a disk.

DISK NO 220		UTILITIES
B	ALL PURPOSE DISASMB. (8B00)	Will disassemble up to 23 bytes on disk.
A	AMPERSAND CATALOG	Reprogram ampersand for catalog.
A	APPLEBETIZE	Alphabetizes up to 999 names.
T	APPLESOFT TO TEXT (EXEC)	Turns an Applesoft program into an exec file.
I	APPLEWRITER TO TEXT	Converts Applewriter I files to text.
I	ASSEMBLER	Microproducts assembler, no instructions.
A	AUTO NUMBER II	Auto line numbering for Applesoft.
A	AUTOSTART ROM EDITOR	Autostart ROM editing for old versions of Apple computers.
A	BACKWARD MEMORY MOVE	Moves a block of memory.
A	BASE CONVERT	Converts hexadecimal, decimal, and octal numbers.
A	BINADR CREATE	Shows address and length of last B file loaded.
A	BINARY LINK TO AB	Tacks a binary program to an Applesoft one.
B	CMP D1 & D2 AFTER COPY	Compares disks.
A	COPY LHS	Whole disk copying program.
A	CREATE RESTORE LN	Restores "reads" to a specific data statement.
A	CTRL CHAR FIND	Flashing control characters.
A	CURSOR DASH	Underlines cursor.
A	CURSOR NO FLASH	Inverse space cursor.
A	DFIND & FIND INSTR	Memory search routine.
A	GARBAGE	Prints random characters on screen.
A	HIDE PROGRAM NAME	Hides a filename from catalog.
T	INTEGER TO TEXT (EXEC)	Captures an Integer file.
B	KEYEDIT	Use the control keys to move cursor.
A	KEYEDIT & UTILITY DOC	Documentation for KEYEDIT, LIT@, REF@, VAR@.
T	LINE INPUT	Allows quotes, commas, and colons into the input line.
A	LINE INPUT IMPROVED	"

B	LIT	Lists string literals in alphabetical order.
B	LIT@	"
A	MEM/DUMP TO TEXT FILE	Dumps memory to specified text file.
A	MEMORY INTERPRETER	Memory examination program.
A	POKE FILE	Makes POKE machine language.
A	RAM TEST 48K	Tests memory for flaws.
B	REF	Lists subroutine references.
B	REF@	"
A	REM FORMATTER	Formats REM statements in a program.
I	TEXT FILE OUT/CPY	Reads or copies a text file.
A	TEXT FILE OUT/CPY (FP)	"
A	TEXT FILE RANDOM DISPLAY	Displays random access text files.
A	TEXT FILE RANDOM FROM SEQ	Prints a sequential text file and puts it in records.
A	TEXT FILE WRITER	Text file editor.
A	TEXT TO APPLEWRITER	Converts a text file for Applewriter I.
B	VAR	Lists variables used in alphabetical order.
B	VAR@	"
A	VOLUME NAME CHANGER I	Replace disk volume message.
A	VOLUME NAME CHANGER II	"
A	WORD REPEATER	Repeats a word or message.
A	WORDS	Randomizes a list of words.

DISK NO 221		UTILITIES
I	BOOTLEG ASSEMBLER	Assembles machine language programs.
I	CLOCK CARD HELLO WARD	Hello program. Locks, unlocks, and deletes files.
I	COPY SINGLE DRIVE 2	Copies disk with a single drive.
I	DISASSEMBLE MACHINE CODE	Disassembles a machine language file.
I	DISK QUICK	Locks, unlocks, and deletes files.
I	ENTRY POINTS	Lists Integer BASIC command entry points.
I	JUMP POINTS BASIC	Shows location of BASIC commands in machine language.
I	MAP A FILE	Tells which sector a program is on.
I	POST EDITOR	Edits a BASIC program.
B	SWITCH	Creates an invisible catalog on track 16.
I	SWITCH DOC	Instructions for SWITCH.
B	SWITCH SETUP	"
I	TAPESAVE 2	Saves 20 random numbers to tape.
B	TED II ASCII DRIVER	Allows user to program in assembly language.
I	TED II ASSM LOAD SAVE	"

B	TED II BAUDOT DRIVER	Allows user to program in assembly language.
B	TED II SOURCE	"
I	TEXT FILE CLIST CREATE	Creates a text file to run DOS commands.
I	TRACE	Appends a text program and lists each source statement.
I	VOLUME # CHANGER	Changes disk volume.
T	XREF	Allows user to document an Integer BASIC program.
I	XREF DOC	"
B	XREF LINE # TABLE.X	"
B	XREF SYMBOL TABLE.X	"

DISK NO 222		UTILITIES
I	BAUD RATE	Instructions for BAUD RATE ADJUSTMENT.
I	BAUD RATE ADJUSTMENT	Adjusts printer for input from modem.
B	DRIVER A768 L176	Interfaces Apple with Heathkit.
A	H14 DOCUMENTATION	Instructions for interfacing Apple with Heathkit.
A	H14 INSTRUCTIONS	Interfaces Heathkit to printer.
I	ID 440 SCREEN DUMP	Dumps a hi res picture to an IDS-440 printer.
I	IDS 255 PRINTER DEMO	Tests IDS 255 printer.
A	IDS-440 LABEL MAKER	Makes labels on printer.
A	LABEL NUMBERING	Numbers labels on printer.
A	LISTER TRENDCOM 200	Lists a program to Trendcom 200 printer with margin.
A	PAPER TIGER HGR DUMP	Dumps a hi res picture to printer.
B	PAPER TIGER.PIC	Hi res picture of a cowboy.
A	PICTURE LOADER	Loads a hi res picture to screen.
A	PRINTER CENTRONICS 779	Sets up margins on a Centronics printer.
I	PRINTER IDS	Sends hi res picture over modem (1200 baud).
I	PRINTER IDS SETUP 2	Dumps hi res picture to IDS printer (updated).
I	PRINTER IP 125	Allows use of printer as a typewriter.
B	PRINTER PATCH	Instructions to stop from filling printer buffer while using modem.
A	PRINTER PATCH DOC	Documentation for PRINTER PATCH.
A	PRINTER PR40 BANNER	Prints a banner of letters to printer.
A	PRINTER PR40 JUSTIFY	Word processing program.
I	SILENTYPE BOLD PRINT	Shows uses of silent type printer.
B	TTY A880 L234	Interfaces baudot teletype to Apple.

B	TTY BAUDOT	Interfaces baudot teletype to Apple.
B	TTY BAUDOT DRIVER	"
B	TTY BAUDOT DRIVER MICRO #14	"
B	TWO TONE ALARM	"

DISK NO 223		UTILITIES
I	APPLEADDIX	Simple database program.
A	APPLEADDIX NOTES	Explains APPLEADDIX.
I	AUTOBOOT 16	Boots a 16-sectored disk.
I	CATALOG CREATE	Creates a catalog of disks and software.
I	COPY LHS FAST	Disk copying program.
I	COPY MOGER 2	Copies disk to disk, or disk to tape.
B	FILE #1	Used by COPY MOGER 2.
I	FILE DISK CATALOG	Creates a software list.
I	FREE SECTORS SCOGIN (C)	Tells number of free sectors on a disk.
I	MAP SECTORS PAYMAR 3	Gives a disk map.
I	MEMORY ADDRESSES	Gives memory address of any inputted string.
I	SUBROUTINE PAK	Renumbers or merges programs.
I	TYPEWRITER + SOUND ROUTINE	Sets up a database.
I	UPDATE 16	Updates a 13-sectored disk.
I	UPDATE 16 REVISED	Updates a 13-sectored disk.
I	UPDATE 16 WARNING	Warnings for UPDATE 16.
A	X-FILE CABINET IV	Prints a file from X-MULTIPLE DISK CATALOG.
I	X-MULTIPLE DISK CATALOG	Creates a file.

DISK NO 224		UTILITIES
A	APPEND BINARY TO APPLESOFT	Changes machine language subroutines to BASIC.
A	APPLESOFT LINE WRITER	Adds commonly used subroutines to a file.
A	CAPTURE IB AB	Execute a text file.
A	CATALOG ANALYSIS	Sorts disk files by type.
A	DISK SUMMARY	Summarizes programs on this disk.
A	DISK SUMMARY EDIT	Create explanations for disk files. Needs AMPERSORT II, a copyrighted program.
B	DISPLAY ASC PAGE BY PAGE	Used by DISK SUMMARY.

A	DOG TAG CREDIT LINES	Adds lines to the end of program which cannot be deleted.
A	ERROR HANDLER	Helps programmer debug programs.
A	GREETING SUBROUTINE	Allows entry of a title to a program.
A	POKE BINARY TO BASIC	Call a machine language subroutine.
A	PREFIX ADD	Rename files with prefixes.
A	PREFIX ADD INSTR.	Instructions for PREFIX ADD.
A	PREFIX REMOVE	Removes prefixes from files.
A	RAM TEST 48K 30 MINUTES	Checks RAM in computer.
B	READ TRACK	Tells what is on any track.
A	SMALL SORT V2	Sorts a text file.
A	SSM AIO CARD	Set pointers to use SSM AIO card.
A	TEXT FILE CHAR HEX DUMP	Gives hexadecimal values for strings in a text file.
A	UNDELETE	Undeletes a deleted file.
A	UNDELETE 16 SECTOR	Undeletes a deleted 16-sectored file.
A	UNDELETE 16 SECTOR ONLY	Warning for above.
A	UNDELETE INSTR	Instructions for UNDELETE program.

DISK NO 225		UTILITIES
I	BOOT 16	Boots a 16-sectored disk.
I	COPY SINGLE DRIVE 3	Copies 13 or 16-sectored disks.
I	DISK FULL 3.2.1 INVERSE	Save a file to remind you that your disk is full.
I	DISK SPACE 13	Shows how much space is on a 13-sectored disk.
I	DISK SPACE 16	Shows how much space is on a 16-sectored disk.
I	LINE FIND INSTR	View a machine language program.

DISK NO 226		UTILITIES
A	DIVERSI-DOS	DIVERSI-DOS System Master reads, saves, loads and writes much faster than normal Apple DOS 3.3 and it includes a keyboard buffer and a printer buffer routine using your RAM card.

Note: This disk is personal domain software.

DISK NO 227		UTILITIES/PRINTING
A	EPSON CATALOG DBL STRIKE	Controls darkness of printing.
A	EPSON DRIVER INSTR	Enables control of MX 80 printer within Apple Writer I.

A	EPSON GREETING	Hello message for Epson.
A	EPSON LABELS I	Prints mailing labels.
A	EPSON LABELS II	"
A	EPSON LABELS III	"
A	EPSON LOWER CASE	Prints lower case alphabet.
A	EPSON MX80 CATALOG	Prints the catalog.
A	EPSON MX80 DEMO I	Demo of MX80 features.
A	EPSON MX80 DEMO II	"
A	EPSON MX80 LABEL MAKER I	Mailing label utilities.
A	EPSON MX80 LABEL MAKER II	"
A	EPSON MX80 LABEL MAKER III	"
B	EPSON MX80 LABEL.PIC	"
A	EPSON MX80 PROGRAM LIST	Lists APPLESOFT programs.
A	EPSON MX80 REMINDER CALENDAR	Calendar with date reminders.
A	EPSON MX80 SETUP I	Apple Writer I interface.
A	EPSON MX80 SETUP II	"
A	EPSON UTILITY 3.3 DEMO	For printer control codes.
A	EPSON UTILITY 3.3 INFO	"
A	EPSON WORD GAME	Word search puzzle.
A	EPSON.EXEC.MAKER.A3.3	Creates Epson Exec file for setup.
I	EPSON.EXEC.MAKER.I3.3	"
T	XEPSON.V3.3	Epson setup file.

DISK NO 228		EPSON UTILITIES
A	EPSON HIRES DUMP (C) III	Dump hi res graphics from screen to printer.
A	EPSON HIRES DUMP INSTRUCTIONS	Instructions for EPSON HIRES DUMP (C) III.
A	TRIM	For exact line spacing of printer.
B	BESSEL	Hi res pictures.
B	CHART	"
B	CHESS	"
B	DISNEY CHAR	"
B	INVADERS	"
B	PORTRAIT	"
B	SCHEMATIC	"
A	EPSON HIRES DUMP (C) I	Dumps hi res graphics from screen to printer.
A	EPSON HIRES DUMP (C) II	"
A	EPSON DUMP IMPROVED (C)	"

DISK NO 229		UTILITIES

One-key DOS is compatible with Apple Standard, Diversi-DOS and Apple IIe.

A	MENU	Selection of text files, slide show, etc..
B	AUDREY	Text file viewer.
B	@INTRO	Text files for 1-key DOS to execute 11 DOS commands plus a quick loader DOS.
B	@FEATURES	"
B	@CONVERTING	"
B	@ASM AIDE	"
B	@LICENSES	"
B	@TECH NOTES	"
A	CONNIE	Convert to 1-key DOS.
B	VERT	Files for CONNIE.
B	DKEY	"
B	SUBS	"
A	SLIDE SHOW	Shows 8 pictures in hi res.
I	ONEK13	One-key DOS files.
B	ONEK.11 +	"
A	ONEK.TESTER	"

Note: This disk is personal domain software.

DISK NO 230		UTILITIES
A	AMPERSAND KILL-CATALOG UTILITY	Run a catalog by typing "&" or make a clean break in a catalog with a "Ctrl-C".
A	AMPERSAND LIST UTILITY	Type "&" to list a program.
A	AMPERSAND RUN UTILITY	Type "&" to run a program.
A	ARRAY ERASER	Demonstrates how to create an array and how to erase it.
A	AUTO PROGRAM	Automatic program writer, helps structure an Applesoft program.
I	MESSAGE CHANGES 3.3	Change your existing message.
I	S.CHANGE 3.3	Change the disk volume title, 11 characters or less.
A	BANNER	Centers up to 24 lines of text by scrolling them horizontally.
A	BILLBOARD DISPLAY DEMO	Demonstrates horizontal and vertical scrolling of text.

A	CRAWLER	Type a line of text and the computer scrolls it from right to left.
A	CRAWLER.TUTORIAL	Documentation for CRAWLER.
A	DOS MOVE INFORMATION	Frees up 10K of RAM for those with 16K RAM card.
B	DOS MOVE	"
A	DOS.COMMAND.CHANGER	Change DOS error messages.
A	FILE DELETING PROGRAM	Search and delete unwanted files from the catalog.
A	HEAPSORT	Sort by characters or numbers, print capability available.
B	KRUNCH	Removes unused entries in the catalog caused by deleting files.
A	MENU (ABBR.FP)	Automatic menu providing quick one-key access to catalog files.
A	MENU (SUPER.FP)	"
I	MENU (SUPER.INT)	"
A	MULTIPLE DISKETTE INITIALIZER	Initializes 1 or more blank disks.
A	PAUSE ROUTINE	Inserts a pause when a pause is needed.
A	PDQ INSTRUCTIONS	Fast disk copying program. Two drives needed. Doesn't copy Pascal or Apple CP/M.
B	PDQ	"
A	PRINT USING AND FRIENDS DEMO	Machine language utility which adds formatting variety and other Applesoft capabilities.
B	PU&F.O	"
A	SPACEGET	Tells number of sectors of space left on disk.
A	TEXT DEMO	Demonstration and documentation of the use of test for the beginning Apple programmer.
A	TITLE ROUTINE REWRITE	Centers and prints to screen 3 lines of title page text.

DISK NO 231		UTILITIES
A	AUTONUMBER INFORMATION	Automatically numbers lines in increments of 10, starting with 100.
B	AUTONUMBER.B	"
A	CATALOG HEADER PROG.	Creates a 5-line message above the disk catalog.
A	CONTROL SEE	Types embedded characters or finds them in other programs.

A	CONVERT TO TEXT FILES	Creates text or binary files from Applewriter files, DOS catalogs, or program lists. Requires companion program DIVERTER.
B	DIVERTER	"
A	DISK ARRANGER	Allows modifications to the catalog such as insert title, delete and rearrange lines.
A	DISK ARRANGER INSTRUCTIONS	Documentation for DISK ARRANGER.
A	DISK ARRANGER.EXP	Make modifications to the catalog such as insert title, delete, and rearrange lines.
A	DOS VERSION FINDER	Determines what version of DOS is present on disk and whether it is slave or master.
A	EDITOR	Edit sequential text files such as insert, move, delete, modify, replace, copy or print.
A	FASTBOOT CREATE	Creates a fast booting DOS.
B	FAST.LOADER	Loads the language card.
A	FIND.CONTROL.CHARACTERS	Causes control characters to flash.
A	FREECAT	Determines the free sectors left on the disk.
A	FREECAT INSTRUCTIONS	Instructions and access to FREECAT.
A	HUFFIN	Converts Pascal disk files to DOS 3.3 text files.
A	HUFFIN.INSTRUCTIONS	Instructions for HUFFIN.
A	HYBRID HUFFIN	Converts Pascal to DOS text file.
A	JOYSTICK/PADDLE TESTER	Tests the range of your joystick or paddles.
A	MOVE SCREEN UTILITY	Shows how to move segments of the screen.
A	NAMESORT II	Alphabetically sorts a list by last names.
A	NUMPAD.INSTRUCTIONS	Turns the Apple keyboard into a numeric keypad.
B	NUMPAD.MACH	"
A	PHONE LIST WITH AUTO-DIAL	Stores phone numbers and names and has an automatic dialing feature.
A	RAM TEST 48K	Sequentially tests all 48K of RAM for hard errors, and displays the rows and columns of a defective chip.
A	READ SECTOR	Reads track and sector numbers, then displays the contents on the screen.
B	RECOVER	Recovers deleted files.
A	SECTOR LIST	Reads a file and provides the details such as track and sector numbers, type of file, length, and status.
A	TEXTFILE CONTENTS	Searches the contents of the catalog text files.

DISK NO 232		UTILITIES
A	RAM TEST 48K	Tests 48K for defective chips.
A	TEXT FILE READER (REVISED)	Reads a text file.
A	PROGRAM LISTER WRITER	Lists to Trendcom 200.
B	SANDY'S REM STRIPPER	Strip REM's from a program.
A	REM STRIPPER INFO	"
A	TITLE ROUTINE	Centering routine.
A	ERROR HANDLER	Debugging aid.
A	APPLESOFT LINE WRITER	Subroutine library.
I	CHR$ FUNCTION	CHR$(X) INT.BASIC.
A	PAPER TIGER SETUP	Setup a Paper Tiger printer.
A	ARRAY ERASER	Delete array from memory.
A	LITERAL INPUT	Allow ",", "'", ":" in INPUT.
A	CONTROL SEE	Shows control characters as inverse.
A	HIDE	Keeps files from being listed in the catalog.
A	INVISIBLE SIGNATURE	Disguise a text line.
A	JOYSTICK/PADDLE TESTER	Tests stick or paddles.
A	ASCII SCREEN DISPLAY	Make ASCII chart.
A	AMPERSAND LIST UTILITY	Set ampersand to list.
A	AMPERSAND RUN UTILITY	Set ampersand to run.
A	TWIRLING CURSOR	How to "spin" cursor.
A	AMPERSAND KILL-CATALOG UTILITY	Makes ampersand catalog.
A	PAUSE (WORKING) ROUTINE	Polite "please wait...".
A	BILLBOARD DISPLAY DEMO	Text scrolling subroutine.
A	PADDLE TESTER	Tests paddles.
A	LOOKY	Displays memory as ASCII.
A	PHONE LIST WITH AUTO-DIAL	Phone list manager for Hayes modem.
T	PHONE DIRECTORY	"
A	PRINT USING AND FRIENDS DEMO	Ampersand routines.
B	PU&F.O	"
A	A/S INSTRUCTIONS	Instructions for A/S LISTER.
B	A/S LISTER	Listing formatter.
A	REPEAT/UNTIL INSTRUCTIONS	Instructions for B.REPEAT/UNTIL.
B	B.REPEAT/UNTIL	Set ampersand to " Repeat...until Loop".
I	S.REPEAT/UNTIL	"
A	REPEAT/UNTIL DEMO	"
A	MEMORY SCROLLER	Dump memory.

B	MEMORY SCROLLER.OBJ	Dump memory.
T	MEMORY SCROLLER.SRC	"
A	IBMM EXPLANATION	Integer BASIC memory map.
T	IBMM	"
A	IBMM MAKER	Makes text file called Integer BASIC memory maker, prints map of RAM usage.
A	BASES	Base conversion.
B	B.BASES	"
A	FAKE.INSTRUCTION	Instructions for FAKE.OBJ.
B	FAKE.OBJ	Allows commas or colons in text files.
I	FAKE.SRC	"
A	FAKE.SAMPLE	"
A	B.UNDERLINE INSTRUCTIONS	Instructions for B.UNDERLINE.
B	B.UNDERLINE	Underlines cursor.
A	AUTONUMBER INFORMATION	Auto-number during program entry.
A	AS-STRING-FINDER-INSTRUCTIONS	Instructions for AS-STRING-FINDER.
T	AS-STRING-FINDER	Lists strings.
A	HEX 34-BIT DISPLAY	Base conversions.
A	APPLE USING	Prints using simulator.
A	APPLE.USING.TUTORIAL	A tutorial for numerical formatting.
A	CRAWLER	Text that scrolls horizontally.
A	CRAWLER.TUTORIAL	Tutorial for use of scrolling text.

DISK NO 233		UTILITIES
A	NAMESORT II	Sorts a list of words.
A	P.M.W.P.(JUSTIFIED VERSION)	"POOR MAN'S WORD PROCESSOR", a text editor.
A	P.M.W.P./40.PRINTER	"
A	P.M.W.P./80.PRINTER	"
A	POOR MAN'S WORD PROCESSOR	"
A	INPUT ROUTINE	Formats input.
A	SCREEN PRINTER	Dumps screen to printer.
A	DOLLAR	Prints using simulators.
A	USING	"
A	BANNER	Animated messages.
A	NUMPAD.INSTRUCTIONS	Simulates numeric keyboard.
A	CENTURY.DATE	Converts date to "century date".

A	ALIGN	Aligns decimal points.
A	EXPLANATION	Eccentric hello program.
A	EPICUREAN HELLO 1.1	"
T	CAPTURE	Convert Applesoft to text files.
A	CAPTURE.INSTRUCTIONS	"
A	FIND.CONTROL.CHARACTERS	Displays control characters as flashing characters.
A	MEMORY.TEST	Slow memory test.
A	TEXT DEMO	Formats demos.
A	ADDRESS INDEX. INSTRUCTIONS	Memory map.
A	ADDRESS INDEX.LC	"
A	CONVERT APPLEWRITER	Converts Applewriter I to text files.
A	CRAE/APA	Line editors.
A	CRAE/APA.INSTRUCTIONS	"
A	DISPLAY ASC PAGE BY PAGE. INSTR	Dumps memory.
A	LC-KILLER.INSTRUCTIONS	Converts lower to upper case.
T	MEMAP (EXEC)	Memory map.
A	PADDLE TEST	Tests paddles.
A	POKE 33.INSTRUCTIONS	Makes & HOME:POKE 33,0.
R	POKE 33.OBJO	"
A	PUF.INSTRUCTIONS	Print, using ampersand.
T	PUF.SOURCE	"
A	RAM TEST 48K	Restores a new program.

DISK NO 234		UTILITIES
A	APPLE ///.DIS.INFO	Enhanced monitor for III in emulation mode.
I	APPLE /// DISASSEM. SOURCE	"
A	DECIMAL DISASSEMBLER	Examines memory.
A	CREATE INPUT	Writes programs.
T	CREATE INPUT.EXAMPLE	"
A	CREATE OUTPUT	"
T	CREATE OUTPUT.EXAMPLE	"
A	CREATE INSTRUCTIONS	"
T	CREATE INSTRUCTIONS. EXAMPLE	"
A	EXAMPLE GOSUB 60000	"
A	AMOUNT.WRITEOUT	Spells out numbers.
A	DATE.HELLO	Entrance program after the initial DOS boot.

A	DATE.LIST	"
A	BINARY.TO.TEXT.CONVERT	Converts a file to data.
I	ADDRESS2	Multi-base arithmetic.
A	MEMORY DMP	Dumps memory.
A	MEMORY DMP REMARKS DO NOT RUN	"
A	THE LOTTADATA GRID	Demo.
A	ARRAYS	Demonstrates how to use arrays.
A	INLINED.DOC	Input editor.
A	SOFTFIND.DOC	Finds strings.
B	OLD MONITOR	Monitors ROM on file.
I	INT MONITOR FOR PLUS	"
A	INT MONITOR FOR INTEGER	"
A	COMPARE	Compares text files.
A	RELOADER.DOC	Relocates machine language program.
A	LISAFIND.DOC	Machine language program to find character strings within Lisa DK.
A	APPLESOFT AUTO-NUMBER	Automatic line numbering.
A	AUTO PROGRAM	Subroutine generator.
A	AUTO-REDIAL	Hayes utility.
A	DUMP INSTRUCTIONS.A	Hi res dump instructions.
A	MOVE SCREEN UTILITY	Title page routines.
A	ADDRESS SEARCH. INSTRUCTIONS	Memory search.
R	ADDRESS SEARCH.OBJO	"
A	APPRINT FILE MAKER	Formats list.
A	ERROR HANDLER	Error handling subroutine.
A	MENU MAGIC	Hello program.
A	PRETTYPRINT	Formats list.

DISK NO 236 **UTILITIES-ED'S PLOT PACKAGE**

This is an extensive array (1 or 2-dimensional matrix) plotting and generating system including 38 separate, but interlocking programs. Complete documentation is in the next volume, (Ed's Plot Package, DISK NO 237), which is recommended. Hi res pictures and arrays are included.

DISK NO 237 **UTILITIES-ED'S PLOT PACKAGE DOC**

Complete documentation for ED'S PLOT PACKAGE, DISK NO 236.

DISK NO 238		UTILITIES
I	DISK ACCESS UTILITY	Examines a sector or track.
A	CATALOG MANAGEMENT	Categorizes and describes catalog.
A	CATALOG MANAGEMENT - EDIT	"
B	DEMUFFIN 3.3	Converts 3.3 DOS to 3.2 DOS.
B	DEMUFFIN HARD	"
I	MUFFIN CATALOG	Catalogs 3.2 from 3.3.
B	MUFFIN	Converts 3.2 to 3.3.
A	DOC.1	Documentation for DEMUFFIN.
I	DISK ACCESS	Examines a sector or a track.
B	LHS DISK MAP	Shows used sectors and free sectors.
I	DISK ZAP	Sector editor.
A	DOS MOVE INFORMATION	Relocates DOS into RAM card or IIe/IIc.
B	DOS MOVE	"
A	CONVERT TO TEXT FILES	Converts to text files.
B	DIVERTER A$4FEO/L$1B	"
B	RECOVER	Recovers a deleted program.
A	FILEDUMP	Allows listing any DOS text to screen or printer.
I	DISK ZAP 3.3	Sector editor.
A	DOS VERSION FINDER	Shows current DOS version.
A	EDITOR	Text file editor.
A	FILE DELETING PROGRAM	Deletes any file.
I	FILE TRANSFER 3.3	Single drive file copy.
A	FREECAT	Frees space in catalog.
A	FREECAT INSTRUCTIONS	"
A	KRUNCH	Shortens catalog length on disk.
A	MULTIPLE DISKETTE INITIALISER	Initializes many disks.
A	DISK SNOOPER	Dumps sector.
B	DISK SNOOPER PRINTOUT	"
A	TEXTFILE CONTENTS	Dumps text file.
A	DOS.COMMAND.CHANGER	Changes DOS commands.
B	JOHN'S.VTOC.MAP	Shows free sectors and used sectors.

DISK NO 239		UTILITIES
A	HUFFIN	Reads from Pascal disk.
A	HUFFIN.INSTRUCTIONS	"
A	SECTOR LIST	Reads the track/sector list of a file, prints a list of each track/sector used by that file.
A	TRACK 35.INSTRUCTIONS	Makes extra track on disks.
B	TRACK 35.OBJ	"
B	TRACK 35.OBJO	"
T	TRACK 35.SOURCE	"
A	FREE.SECTORS. INSTRUCTIONS	Frees sectors on disk.
I	S.FREE.SECTORS	"
B	FREE.SECTORS	"
I	MESSAGE CHANGE 3.3	Changes disk volume message.
I	S.CHANGE 3.3	"
B	B.CHANGE 3.3	"
A	SPACEGET	Frees space on disk.
A	SUPER.RAT	Dumps text file.
A	EXEC.FILE.TUTORIAL	Tutorial on exec files.
A	ICEBREAKER.II	Tutorial on random access files.
A	CATALOG HEADER PROG.	Builds 5-line catalog header.
A	MASTER CATALOG	Catalogs disks and allows changes, acts like a small database.
A	MASTER CATALOG PRINTER. REV	"
A	DISK FILE ROUTINES	Demo of disk cards.
A	NEW COPY	Copies whole disks.
A	DOC.1	Documentation for DEMUFFIN on DISK NO 238.
T	CAPTURE	Line capture.
A	COMPARE MODIFIES	Compares 2 versions of a program and prints the changes.
A	TEXT WRITER B1	Text editor.
A	DISK FREE SPACE	Shows free and used sectors.
A	DISKCAN	Scans disk for data.
B	DISKSCAN.OBJ1	"
B	DISKSCAN.OBJ2	"
B	FAST.LOADER	Creates auto-load RAM card disk.
B	FAST.RWTS	"
A	FASTBOOT CREATE	"
T	GETFILE	Sector count and catalog.

A	GETFILE INFO	Sector count and catalog.
B	GETFILE.OBJ	"
T	GETSECT	"
B	GETSECT.OBJ	"
A	HYBRID HUFFIN	Converts Pascal to 3.3 and vice versa.

DISK NO 240		UTILITIES
A	CATPRINT	Sends catalog to printer.
A	COPYA	Copies whole disks.
B	COPY.OBJO	"
A	DISK ARRANGER INSTRUCTIONS	Sorts catalog.
A	DISK ARRANGER	"
A	ARRANGER.EXP	"
A	DISK CHECK INSTRUCTIONS	Checks for bad sectors.
A	DISK MAP PROGRAM	Maps free and used sectors.
A	DISK MAP	"
A	DISK SORT-VER 3.3	Customizes catalog.
A	DISKCAT	Catalogs utilities.
T	HELP.CAT	"
B	FID	File utilities.
T	HELP	Miscellaneous notes.
B	INVERSE REMS	Highlights REMs.
B	LHS CATALOG	Catalog with file lengths.
A	MENU (ABBR.FP)	One-key menus.
A	MENU (SELECTIVE.FP)	"
A	MENU (SUPER.FP)	"
I	MENU (SUPER.INT)	"
A	PDQ INSTRUCTIONS	Fast disk copying.
B	PDQ	"
A	SCREEN EDIT	Edits text.
A	SCREEN WRITE INSTRUCTIONS	Screen editor.
B	SCREEN WRITE 2.1	"
B	SCR.WRI.INST.1	"
B	SCR.WRI.INST.2	"
B	SCR.WRI.INST.3	"
A	SHOW CTRL	Highlights control characters.

A	SPCA LABELLER	Prints mailing labels.
A	SUPER LABEL PRINTER II	"
A	TRICK FILE NAME UTILITY	Fake file names.
A	DOCUMENTATION	Reads HELP.

Communication

With these communication disks, an Apple computer, and a modem, you can start your own bulletin board system. Utilities are provided for dialing and answering, for sending and receiving files, and for ensuring the proper working order of your modem.

DISK NO 260		COMMUNICATION
T	MESSAGES	Complete Apple Bulletin Board System (ABBS) for use with modem. Allows other users to call your Apple, leave messages, and transfer files.
A	WAPABBS	"
T	USERS	"
T	MEETINGS	"
B	ABBS1.OBJO	"
B	ABBS3.OBJO	"
A	BBS	"
T	BULLETIN	"
T	STARTUP	"
T	CLUB STORE	"
B	USERS.OBJ	"

DISK NO 261		COMMUNICATION
A	RUN THIS SECOND	Documentation for ABBS (DISK NO 260) text files readable from word processor or from software on disk.
T	UPLOAD1	"
T	TO SYSOP	"
T	REM II INSTRUCTIONS	"
T	UPLOAD2	"
T	OPINION	"
T	ABBS1	"
T	REMEMBER II	"
T	INSTRUCTIONS	"
A	BUILD USERES.OBJ	"

A	ABBS3	"
T	SYOP INSTRUCTIONS	"
T	WAPABBS NOTES	"
A	RUN THIS FIRST	"

DISK NO 262		COMMUNICATION
A	HAYES MENU	Selection of programs on disk.
A	SELFTEST II	Tests modem switches and status.
A	STORE & FORWARD	Receives a message and forwards it to another computer.
A	PICKUP	Answers the phone when it rings.
A	AUTO DIAL	Dials from a list of numbers.
I	DUMBO	Dials a phone number.
A	TRANSFER	Copies text files over the modem.
A	BASIC EXTRACTOR	Extracts basic to modem.
A	ALARM	Wake-up call.
A	DIAL A HUMAN	Dials until phone is answered.
A	ANSWER ON NTH RING MODIFIED	Waits for n ring, then answers.
A	SOURCEON	Dials the "Source", then logs on.
A	DJ CONVERTER	Converts Dow Jones to Hayes modem.
A	MICROMODEM FLAGS	Reads Hayes modem switches.

DISK NO 263		COMMUNICATION
I	MODEM ALARM CLOCK	Telephone modem alarm clock.
A	MODEM AUTO DIALER	Names and numbers and auto dialing.
A	MODEM CHESS	Chess game for two players, played over the phone with use of modem.
A	MODEM HELLO	A greeting programmed into the computer, for use of modem to answer phone.
A	MODEM PHONE PICKUP	Enables user to pick up phone in answer mode.
I	MODEM SELF TEST	Test to insure modem is working.
I	MODEM SELF TEST PROGRAM	"
A	MODEM TEXT FILE TRANSFER	For receiving and sending files.

Pascal

The programs on these disks are written in Pascal, a structured, high level language. The disks include programming, communication, and utility programs, all of which serve as a foundation for other applications. There are also business, word processing, and printing programs, valuable for commercial ventures. For personal and entertainment purposes, there are graphics, games, and personal management programs.

DISK NO 270		PASCAL WORD PROCESSING AND PRINTING
P	ADMERG.CODE	Program to merge data files.
P	ADMERG.TEXT	"
P	PASCALZAP.TEXT	Pascal block editor.
P	PASCALZAP.CODE	"
P	FILEIO.TEXT	Demonstrates file I/O by managing a mail list file.
P	FILEIO.CODE	"
P	PRINT.TEXT	Copies file to printer while removing control characters.
P	PRINTSET.TEXT	Drivers for setting soft switches for the Centronics 737 printer.
P	SETINT.TEXT	"
P	WP.TEXT	A complete word processing program.
P	WP.CODE	"
P	DOC.TEXT	"
P	TIGER.UNIT.CODE	Hi res screen dump routine for the Paper Tiger Printer.
P	TIGER.TEXT	"
P	SCRNBYT.TEXT	"
P	TEXTPNT.TEXT	Prints text files with heading and justification options.
P	TEXTPNT.CODE	"
P	LINEFEED.TEXT	Turns the Pascal linefeed option on or off.
P	PR737.TEXT	Driver to set up the Centronics 737 printer.
P	EPSON.UNIT.TEXT	Intrinsic unit to simplify the task of sending control codes to the Epson printer. This unit sets up procedures that send the appropriate codes to the printer when used.
P	EPSON.UNIT.CODE	"
P	CONCORD.TEXT	Reads text files and sends them to printer with the control characters filtered out.
P	CONCORD.CODE	"
P	SETUPMX80.TEXT	Sets the soft switches for an Epson printer.

P	DIAPLOT.TEXT	A set of programs to allow the Diablo printer to function as a plotter. This is also a demonstration.
P	DIABLO.TEXT	"
P	PLOTTEST.TEXT	"
P	DIABLO-DOC.TEXT	"
P	MINIPUB.TEXT	Prints text files complete with page numbers and headings.
P	MINIPUB.CODE	"
P	PRTPAGE.TEXT	Sends text files to printer (no extras).

DISK NO 271		PASCAL BUSINESS
P	CHECKBOOK.TEXT	A well written program to keep a checkbook up-to-date. Demonstration of data files for storage.
P	NEWCARBUY2.TEXT	Weighs a decision to buy a new car or keep the old one.
P	NEWCARBUY2.CODE	"
P	SHOPNSAVE.TEXT	Simple program to calculate the dollars and cents amount of an item given a percentage discount.
P	CREDITOPTN.TEXT	Determines monthly payments on a Visa card.
P	LOANTERM.TEXT	Calculates the terms of a loan.
P	REGPAYMENT.TEXT	Determines the regular payments of a loan.
P	REMBALANCE.TEXT	Calculates the remaining balance of a loan.
P	FUTUREVALU.TEXT	Calculates the growth of a savings account given the interest and any regular deposits.
P	AMTOFDEPRE.TEXT	Calculates the amount of depreciation.
P	DEBTS.TEXT	Keeps track of debts with STORE.DATA file below.
P	STORE.DATA	"
P	CASHREG.TEXT	Interesting program which calculates change in dollars, quarters, dimes, etc..

DISK NO 272		PASCAL BUSINESS
P	PAYROLL	This entire list of programs is devoted to keeping complete and up-to-date payroll records and to demonstrating the use of data files in Pascal.
P	FD.PART3.TEXT	"
P	FD.INTRO.CODE	"
P	FD.PART1.TEXT	"
P	FD.PART2.TEXT	"
P	FILEDEMO.TEXT	"
P	FILEDEMO.CODE	"
P	FD.INTRO.TEXT	"

DISK NO 273		PASCAL DISK UTILITY
P	MINIFILER.TEXT	Catalogs the directory.
P	MENU.TEXT	Menu program to chain into other programs via the Exec command.
P	MENUDOC.TEXT	"
P	DIR.TEXT	Catalogs Pascal directory.
P	DIRDOC.TEXT	"
P	MASTERCA.TEXT	Create a master catalog of many disks.
P	NEWDIR.TEXT	"
P	DISKDATE.TEXT	Changes the date on the disk.
P	FILEPATCH.TEXT	Edit individual bytes in a file.
P	DISKDISP.TEXT	Disk block display utility.
P	DISKDISP.CODE	"
P	FILEDEMO7.TEXT	Demo of a text file I/O.
P	FILEBURP.TEXT	Read and dump a file regardless of type.
P	DOSPASCAL.TEXT	Convert DOS text files to Pascal ASCII files.
P	CLEAN.TEXT	Utility to repair directory structure of a Pascal disk should it be damaged.
P	CLEAN2.TEXT	"
P	FILEMAKER.TEXT	"
P	HOWTO.TEXT	"
P	DISKDUMP.TEXT	Routine to dump disk to 80 column display or printer, by sector or Pascal block number.
P	DISKDUMP.CODE	"
P	DOSCAT.TEXT	Routine to catalog a DOS 3.3 diskette from Pascal.
P	DOSCAT.CODE	"
P	COPYONE. TEXT	Single drive copy routine.
P	DISASM.DOC.TEXT	A complete file disassembler.
P	ASM.SAMPLE.TEXT	"
P	DISASM.TEXT	"

DISK NO 274		PASCAL COMMUNICATIONS
P	TIMERSUTFF.TEXT	Program to use a Mountain Apple Clock Card. Allows use of the clock as a timer for certain applications.
P	MICROMODEM.TEXT	Unit for the DC Hayes Mircomodem II. Program from article in "Byte" magazine, Feb. 1981.
P	NATIVECODE.TEXT	"
P	MICRO.TEXT	"
P	SYSGEN.TEXT	"
P	STARTGEN.TEXT	"
P	FULL.TEXT	"
P	NATIVECODE.CODE	"
P	MICRO.CODE	"
P	MICRO.LINK	"
P	FULL DUPLEX.CODE	"
P	SYSGEN.CODE	"
P	STARTUP.CODE	"
P	MODEMTEST.TEXT	Pascal version of the DC Hayes modem test routine.
P	MODEM.LIBRARY	Acts as a bulletin board and record all calls and responses.
P	FILER.IMPL.CODE	"
P	LIST.TEXT	"
P	ANSWER.TEXT	"
P	ANSWER.CODE	"
P	LOG.TEXT	"
P	GETIME.TEXT	Routines to use with the California Computer Systems (CCS) clock card in Pascal.
P	STRFORT.TEXT	"
P	CLOCKUNIT.TEXT	"
P	CLKUNT1.1.CODE	"
P	CLOCK.DOC.TEXT	"
P	STARTUP.TEXT	"

DISK NO 275		PASCAL PROGRAMMING
P	BIOSUNIT.TEXT	Routines that allow inverse and flash modes in Pascal.
P	BIOSDEMO.TEXT	"
P	BIOSDOC.TEXT	"
P	BIOSSTUFF.TEXT	"
P	INPUT.CODE	Prevents incorrect numerical input causing the program to crash.
P	INPUT.TEXT	"
P	MIRRORIMAG.TEXT	Different ways to print text on the screen.
P	SLOMESSAGE.TEXT	"
P	PALINDROME.TEXT	"
P	BILLBOARDS.TEXT	"
P	ERASERS1.TEXT	Different ways to erase all or part of the text screen.
P	DRAFTSMAN.TEXT	Demonstrates possible borders for a title page.
P	DOCUMENT.TEXT	Units for formatting text in 40 column display.
P	FORMAT.TEXT	"
P	MONEY.TEXT	"
P	UNSTRING.TEXT	"
P	FORMATUNIT.TEXT	"
P	TABDEMO.TEXT	Demonstrates the difference between using gotoxy(X,Y) and Writeln(":) to print text.
P	TABDEMO.CODE	"
P	LOCASE.ART.TEXT	Modifies Pascal to use the Don Paymar lowercase adaptor.
P	FILEPATCH.TEXT	"
P	SPLTSCREEN.TEXT	Demonstrates the use of split screens (popularly known as windows) in programs.
P	SPLTSCREEN.CODE	"
P	SMARTERM.TEXT	Unit to change from text to hi res and to turn the cursor on or off.
P	SMARTERM.CODE	"
P	LCPAT1.1.TEXT	Another lowercase update program.
P	MODEDEMO.TEXT	Demonstrates the different modes of hi res, lo res, and text.

DISK NO 276		PASCAL GAMES
P	CRYPTODOCT.TEXT	Allows users to input and/or solve cryptograms, like those found in the puzzle section of the newspaper.
P	CRYPTO.TEXT	"
P	MASTER.TEXT	Generates combinations for Mastermind. Does not form words, creates a random sequence of letters.
P	MASTER.CODE	"
P	OTHELLO.TEXT	Excellent program of Othello, very difficult to win.
P	OTHELL1.TEXT	"
P	OTHELL2.TEXT	"
P	OTHELLINIT.TEXT	"
P	BLACKJACK.TEXT	Well written program of the casino version of Blackjack.
P	CHECKERS.TEXT	Acts as a checkers opponent.
P	CROSSWORD.TEXT	Program to create crosswords and cryptograms from inputted words and phrases.
P	CHASE.TEXT	Game that requires the player to dodge and outmaneuver attack robots.

DISK NO 277		PASCAL GRAPHICS
P	DSPCHRSET.TEXT	Displays the contents of the file SYSTEM. CHARSET, (on the Pascal System Master).
P	DEFCHARS.TEXT	Modifies the contents of SYSTEM.CHARSET.
P	CRECHARSET.TEXT	Program to edit SYSTEM.CHARSET.
P	CRECHARDOC.TEXT	"
P	SERENDIP.TEXT	A set of interesting graphic demos.
P	CUBE.TEXT	"
P	DOODLER.TEXT	"
P	BLIZZARD.CODE	"
P	PILOT.TEXT	Converts Pilot source code to Pascal source code.
P	SKETCH2.TEXT	Works exactly like 'Etch-A-Sketch' with 2 paddles.
P	GRAPH1.TEXT	Programs from the book "Problem Solving With Pascal".
P	GRAPH2.TEXT	"
P	SQUARES.TEXT	"
P	HEXAGONS.TEXT	"
P	GRAFPROC.TEXT	"
P	HEXAGON2.TEXT	"
P	STARS.TEXT	"
P	DEMOPIC.TEXT	Stores hi res images as photo files.

P	CHAREDIT.TEXT	Edits the SYSTEM.CHARSET.
P	CHAREDIT.CODE	"
P	GRAFEDIT.TEXT	Helps draw circles and figures with straight lines using the joystick or paddles.
P	GRAFEDIT.CODE	"
P	SHOWFOTO.TEXT	Displays photo files from GRAFEDIT above or other sources.
P	SHOWFOTO.CODE	"
P	SNOWFLAKE.TEXT	Draws a snowflake with X number of sides.
P	SNOWFLAKE.CODE	"
P	TURTLE.TEXT	A way to use Logo Turtle graphics in Pascal.
P	TURTLE.CODE	"
P	PLOTTER.TEXT	Plots 3-D math functions.
P	PLOTTER.CODE	"

DISK NO 278		PASCAL GRAPHICS
P	GENEPOOL.TEXT	Graphically traces the DNA code through several generations.
P	DRAW.TEXT	Routine to draw a checkerboard.
P	PIECEMAKER.TEXT	Routine to draw a "?".
P	DRAWLINE.TEXT	Routine to determine the points used to draw a line.
P	DRAWLINE.CODE	"
P	FIGURE.TEXT	Draws a star with X amount of points.
P	COLOR.BAR.TEXT	Demonstrates the color capability of Pascal.
P	POLAR.EX.TEXT	Draw patterns using the idea of polar coordinates.
P	POLORGRAPH.TEXT	"
P	POLORLOOP.TEXT	"
P	EPICYCLOID.TEXT	"
P	HYPO.THREE.TEXT	"
P	FLOWER.TEXT	Program from the book "Problem Solving With Pascal".
P	KINETICART.TEXT	Graphics and sound demo.
P	KINETICART.CODE	"
P	TWOD.TEXT	Excellent demonstration of 3-D plotting.
P	TWOD.CODE	"
P	TWOD1.TEXT	"

CP/M

Utility, game and modem programs are included in this category. The game disk offers a variety of games such as Russian Roulette, Star Trek and Mugwumps. The utilities disks contain many programs to enhance the use of the computer system. The modem disk contains four versions: 2.0, 4.1, 4.9 and the very popular 7.2.

DISK NO 290		CP/M UTILITY
ERASE	.COM:	Erases files using wildcards and prompting, (self-documented).
RENAME	.COM:	File renaming utility with wildcards and prompting, (self-documented).
SQ	.COM:	File squashing utility, compacts file size.
USQ	.COM:	File unsquashing utility, uncompacts file for use.
SQ/USQ	.DOC:	USQ and SQ documentation.
TYPESQ	.COM:	Displays squashed files on screen or printer, (self-documented).
XDIR	.COM:	Displays hidden and normal filenames alphabetically.
PROTECT	.COM:	Sets R/W-R/O hidden-normal flags for files, (self-documented).
PPIP	.COM:	Patched PIP allows disk reset and command repeat. Enter "R" to reset disk. Enter "!" to repeat the last command.

DISK NO 291		CP/M GAMES
SALVO	.BAS:	Sink the enemy ships or be sunk.
MUGWUMP	.BAS:	Ten tries to find 4 Mugwumps.
TOWERS	.BAS:	Move the stack from left to right.
STARTREK	.BAS:	Zap the Klingons. Protect the galaxy but don't get shot.
RUSROU	.BAS:	Russian Roulette.
ORBIT	.BAS:	Torpedo the Romulan ship.
LIFE 2	.BAS:	Maneuver your pieces to kill off your enemy's pieces.
TARGET	.BAS:	Shoot the target using the keyboard.
TREK INSTR	.BAS:	Instructions for STARTREK.
MASTERMIND	.BAS:	Guess the computer's pattern, then it guesses yours.

DISK NO 292		CP/M UTILITY
MAST	.CAT:	Used with CAT.COM.
CAT	.COM:	Catalog system using MAST.CAT to display a structured directory.
CATALOG	.DOC:	Instructions for CAT.COM: and UCAT.COM:.
UCAT	.COM:	Maintains the MAST.CAT file. See CATALOG. DOC for instructions.
DIR3	.COM:	Displays directory with file lengths and free space.
INDEX	.COM:	Directory with file lengths and free space on disk.
INDEX	.DOC:	Documentation for INDEX.
SD-43	.COM:	Directory with lengths and remaining room.
FMAP	.COM:	Shows the mapping of files on the disk.
MLIST50	.COM:	Displays the contents of any file in ASCII.
FILES	.COM:	Displays the disk space used by any file.
FLS	.COM:	Parameter list builder for any file.
CLEAN	.COM:	Directory manager for clearing/compacting used disks, (self-documented).
CRCK	.COM:	Shows the crc (circular redundancy check) for any file to check for errors.
CRC-ART	.DOC:	Documentation for CRCK.
DU-V75	.COM:	CP/M sector editor.
DV-V75	.DOC:	Documentation for DU-V75.

DISK NO 293		CP/M COMMUNICATION
APXMODEM	.COM:	APXMODEM driver program version 4.1.
MODEM20	.COM:	Apple modem driver version 2.0.
MODEM20	.DOC:	Documentation for MODEM20.
MODEM72	.COM:	Modem driver version 7.2.
XMODEM	.COM:	XMODEM modem driver version 4.9.

DISK NO 294		CP/M UTILITY
HELP	.COM:	Help for CP/M trouble spots, uses .hlp files on same disk, (self-documented).
REZILOG	.COM:	8080 CPU machine code disassembler.

DISK NO 295		CP/M UTILITY
RESOURCE	.COM:	Complete memory modification program.
RESOURCE	.DOC:	Documentation for RESOURCE.
TPA	.COM:	Tells the temporary program area size.

DISK NO 296		CP/M CALENDAR
/	.COM:	Enter more than one directive to a program at entry.
/	.DOC:	Documentation for /.
CAL-13	.COM:	Enter a month and year, gives the calendar for that month, (self-documented).

EAMON

The Public Domain Exchange carries seventy Eamon Adventure games, each on a separate disk. The Eamon Master is on the MAIN HALL & BEGINNER'S CAVE disk, which is DISK NO E1. Remove the write protect when using the Eamon Master disk. Run the Eamon Master first, before playing any of the other adventures! After a time the Eamon Master will give the user six options. Choose the "Go on an Adventure" option. At this point, the Eamon Master asks the user to remove the Eamon Master disk, insert another adventure disk, and press "C". The chosen adventure will now be ready to play.

There are four Eamon Utility disks with which the user can manipulate the settings and characters of the Eamon Adventures and Tournaments.

The three Eamon Tournaments are similiar to Eamon Adventures, but any number of players can take turns and try to score points by correctly guiding a character through the adventure.

The EAMON DESIGNER allows users to create their own adventure games. There are two "manuals" on this disk that explain all the secrets of Eamon and illustrate how to design your own adventure. Your adventure appears on the monitor and can be printed.

DISK NO		EAMON ADVENTURES
E1	MAIN HALL & BEGINNER'S CAVE (version 4)	Create a character and explore the Beginner's Cave. This disk is needed to boot the other 69 Eamon Adventure disks.
E2	LAIR OF THE MINOTAUR	Escape from the Lair of the Minotaur.
E3	THE CAVE OF THE MIND	Adventure in your own mind.
E4	THE ZYPHUR RIVERVENTURE	Deliver Professor Axom from the hands of the evil Black Warrior and be richly rewarded.
E5	CASTLE OF DOOM	Adventure in a dungeon that is run by old ladies.
E6	THE DEATH STAR	Try to shut down the Death Star while trying to defeat Darth Vader.
E7	THE DEVIL'S TOMB	Try to escape from a dungeon in hell.
E8	THE ABDUCTOR'S QUARTERS	Rescue a friend from a madman.

E9	ASSAULT ON THE CLONE MASTER	Destroy the evil clone master.
E10	THE MAGIC KINGDOM	Escape from another realm.
E11	THE TOMB OF MOLINAR	Free the ancient wizard from his tomb so that he can save the world.
E12	QUEST FOR TREZORE	Get past Trezore's traps and get his help for your friend.
E13	CAVES OF TREASURE ISLAND	Rescue a fellow adventurer from Treasure Island.
E14	FURIOSO	Foil the smuggler's plans.
E15	HEROES CASTLE	Rescue a maiden's lover from an evil businessman.
E16	CAVES OF MONDAMEN	Explore an underground labyrinth.
E17	MERLIN'S CASTLE	Escape from Merlin's castle.
E18	HOGARTH CASTLE	Rescue the maiden Rowino from an evil prince.
E19	DEATH TRAP	Explore a cave to win a bet.
E20	THE BLACK DEATH	Get a serum away from a mad doctor to save the kingdom from a plague.
E21	THE QUEST FOR MARRON	Find the only man who can cure your friend of a deadly disease.
E22	THE SENATOR'S CHAMBERS	Rescue state officials from senator's mansion.
E23	THE TEMPLE OF NGURCT	Adventure in ancient ruins.
E24	BLACK MOUNTAIN	Capture the notorious Black Bark.
E25	NUCLEAR NIGHTMARE	Stop a madman from destroying the kingdom.
E26	ASSAULT ON THE MOLE MAN	Stop the moleman's evil plans.
E27	REVENGE OF THE MOLE MAN	Try to find a village that has disappeared.
E28	THE TOWER OF LONDON	Travel to the Tower of London. Prevent the crown jewels from being stolen or steal them for yourself.
E29	THE LOST ISLAND OF APPLE	Attempt to get off of Apple Island.
E30	UNDERGROUND CITY	Find your way back to your own world, for advanced players.
E31	THE GAUNTLET	Try to find a god in another realm of existence.
E32	HOUSE OF ILL REPUTE	"Adventure" in a house of ill repute.
E33	THE ORB OF POLARIS	Find an orb for an aged wizard.
E34	DEATH'S GATEWAY	Explore the mystery of a strange staircase.
E35	THE LAIR OF THE MUTANTS	Defeat the mutant master before he takes over the world.

E36	THE CITADEL OF BLOOD	Explore an ancient castle.
E37	QUEST FOR THE HOLY GRAIL	Find the Holy Grail the way Monty Python did.
E38	CITY IN THE CLOUDS	Rescue Han Solo and Princess Leah from a floating city.
E39	MUSEUM OF UNNATURAL HISTORY	Get a museum back from another dimension.
E40	THE DAEMON'S PLAYGROUND	You are trapped in a Daemon's Playground.
E41	THE CAVERNS OF LANST	Go on an archaeological expedition.
E42	ALTERNATE BEGINNER'S CAVE	Expanded Beginner's Cave.
E43	PRIESTS OF XIM	Explore the tombs of the Priests of Xim.
E44	ESCAPE FROM THE ORC LAIR	Foil a plan to capture guild members.
E45	SWORDQUEST	Recover Excalibur for King Arthur.
E46	LIFEQUEST	Recover some herbs for the King's daughter.
E47	FUTUREQUEST	Travel to the future and destroy an alien emperor to save the galaxy.
E48	PICNIC IN PARADISE	Find your way home from paradise.
E49	THE CASTLE KOPHINOS	Clear the castle of benevolent beings.
E50	BEHIND THE SEALED DOOR	Solve the mystery of the disappearing people.
E51	CAVES OF EAMON BLUFF	Explore the caves under Eamon Bluff.
E52	THE DEVIL'S DUNGEON	Adventure in a dungeon.
E53	FEAST OF CARROLL	Find your way out of a mysterious place.
E54	CRYSTAL MOUNTAIN	Try to find the legendary treasures of the Crystal Mountain.
E55	MASTER'S DUNGEON	Find your way out of a series of caverns.
E56	LOST ADVENTURE	Adventure in a strange temple.
E57	MANXOME FOE	You are mysteriously kidnapped.
E58	LAND OF DEATH	Travel through time.
E59	THE JUNGLES OF VIETNAM	You've been drafted into the U.S. Army.
E60	SEWERS OF CHICAGO	Slaughter rats in Chicago.
E61	HARPY CLOUD	Adventure in a kingdom in the clouds.
E62	CAVERNS OF DOOM	Find the parts of the Apple IIe and be rewarded richly.
E63	VALKENBURG CASTLE	Regain a castle for the rightful owner.
E64	MODERN PROBLEMS	Try to survive in Seattle in 1983.
E65	THE SCHOOL OF DEATH	Retrieve a Baron's treasures from another plane of existence.
E66	XENON DUNGEONS	Stop a madman from destroying the Main Hall.

E67	CHAOSIUM CAVES	Get a medallion back from a tryant.
E68	THE SMITH'S STRONGHOLD	Attempt to pluck tooth from a dragon's mouth.
E69	BLACK CASTLE OF NAGOG	Recover a medallion to cure a possessed hero.
E70	HOUSE ON EAMON RIDGE	Explore the mysteries of an old house.

DISK NO		EAMON UTILITIES
EU1	EAMON UTILITY 1	Utilities including: condense character, character maintenance, snappy maintenance, resurrect, quick room print, adventure log, manual labels, clone.
EU2	EAMON UTILITY 2	Utilities include: quick room print, room analysis, etc..
EU3	EAMON UTILITY 3	Utilities include: consolidate monsters, monster battle, check textfiles, list monsters.
EU4	EAMON UTILITY 4	Utilities include: condense characters, room analysis, dungeonaid, remove dummy artifacts, quick room print, artifact maintenance, flex dungeon list, create text to save game.

DISK NO		EAMON TOURNAMENT ADVENTURES
ET1	THE CASTLE OF COUNT FUEY	Get the possessions of the Baron out of the castle in an hour and a half, (does not require Main Hall disk).
ET2	THE SEARCH FOR THE KEY	Retrieve a key to rescue the king's officials, (does not require Main Hall disk).
ET3	RESCUE MISSION-PART II	Now that you have the Ray, rescue the officials.

DISK NO		EAMON DESIGNER
ED6	EAMON DESIGNER 6 (version 6)	Design your own Eamon adventures.

Glossary

A	Applesoft BASIC.
ASCII	American Standard Code for Information Interchange.
assembly	The translation of a source program written in a symbolic language into an object or target program in a machine language.
B	Binary (assembly language).
BASIC	Beginner's All Purpose Symbolic Instruction Code.
baud	A technical term, originally used to express the capabilities of a telegraph transmission facility in terms of "modulation rate per unit of time...".
binary	A numbering system based on 2's rather than 10's which uses only the digits 0 and 1 when written.
Boolean	Pertaining to the algebra developed by George Boole.
demo.	Demonstration.
doc.	Documentation.
DOS	Disk Operating System.
exec	Execute.
execute	To carry out an instruction or perform a routine. To interpret a machine instruction and perform the indicated operation(s) on the operand(s) specified.
font	Collection of letters, numbers, punctuation marks and other typographical symbols with a consistent appearance.
hex	Notation of numbers in the base 16.
hi res	High resolution graphics.
I	Integer BASIC.
integer	A complete entity; a whole (not fractional or mixed) number.
instr.	Instructions.
lo res	Low resolution graphics.
load	To enter or add to the internal storage of a computer various information from auxiliary, intermediate, or external storage.
modem	Acronym for MOdulator DEModulator unit. A device that converts data from a form which is compatible with data processing equipment to a form that is compatible with transmission facilities, and vice versa.
monitor	A black-and-white or color crt (cathode ray tube) display consisting of rows and columns of elements operating system.
RAM	Acronym for Random Access Memory.
REM	Acronym for REcognition Memory.
ROM	Acronym for Read Only Memory.

scrolling	A feature that allows text to be moved up or down, so as to show material that does not fit on the display screen.
T	Text file.
text	That part of a message that contains the information to be conveyed.
text editor	A text editor provides the system user with a flexible source text generation system. Source statements are entered via any source input device/file, and the entered text may be output or statements added, deleted, or modified. It permits the order of statements or groups of statements to be altered at any time.
text file	File made up of that part of a message that contains the information to be conveyed.
text games	Games that do not include graphics.

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